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# Students' writing self-efficacy, motivation, and experience: Predictors in journalism education

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I am submitting herewith a dissertation written by Matthew Bryan Broaddus entitled "Students' writing self-efficacy, motivation, and experience: Predictors in journalism education." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communication and Information.

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Students' Writing Self-Efficacy, Motivation, and Experience:  
Predictors in Journalism Writing Education

A Dissertation Presented for the  
Doctor of Philosophy  
Degree  
The University of Tennessee, Knoxville

Matthew Bryan Broaddus

May 2012

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## **Dedication**

This dissertation is dedicated to my wonderful wife, Amanda Broaddus, and my three sons, Micah, Caleb, and Levi Broaddus, who have sacrificed so much and have been continually supportive during this process.

## **Acknowledgment**

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## **Abstract**

The field of journalism has gone through several years of turmoil as new technology, platforms, and economic hardships have swept away traditional journalistic practices and models. Print media continues to hemorrhage jobs and money while media outlets adjust to technology-enhanced reporting. College journalism majors often face changing curriculum and graduate feeling unprepared to be competitive in the journalistic job market. While many things have changed in the field, one pillar of journalism that has not changed is the need for journalists to possess an excellent writing ability, supplemented with the ability to think analytically. The connection between students' ability to write well and their self-efficacy belief towards their writing ability is well documented. This study examines factors that play into journalistic writing self-efficacy, such as background, strategies for classroom success, and experiences, as well as looks at the variables that determine a student's ability to write well in a journalistic format. Findings show that classroom education is the most important variable in developing actual journalistic writing ability. Also, students who write well journalistically tend to have lower critical thinking skills, causing a conundrum for journalism industry leaders who desire both skills in reporters.

**Key words:** Writing self-efficacy, journalism, education, writing ability, motivation, social cognitive theory

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## **Introduction**

A crisis has loomed in the field of journalism since the mid-1990s. As traditional newspapers gave way to emerging forms of electronic media, many journalists struggled to adapt to new media models that require 24/7 news cycles, reliance on technology, and a leaner, more multi-skilled workforce. Along with professional journalists, many journalism school faculty members have been left scratching their heads trying to determine what skills are important to have students develop. Students are left navigating evolving journalism curricula as they try to position themselves as qualified candidates in a field that remains in transition. While some journalism programs cling to an antiquated curriculum that focuses on newspaper production, others are adopting new curricula focused on diverse writing skills and technology and their place in journalism (Carnegie-Knight, 2011). The United States Department of Labor's Bureau of Labor Statistics (2011) reports that journalism students who want to be competitive in the current job market should have strong writing skills, computer graphics and desktop-publishing skills, content management system skills, and proficiency in all forms of multimedia, computer-assisted reporting.

## **Rationale**

In 2005, the Carnegie Corporation began an in-depth evaluation of journalism education in the United States. This evaluation was in response to the perceived crisis in the field of Journalism. The Carnegie Corporation began its evaluation by seeking insight from deans of prominent journalism programs and by interviewing industry leaders about the state of journalism education. The consensus of industry leaders was that many of the skills required to be a journalist have changed. Industry leaders saw journalism schools' roles, success, and importance in preparing students for the new world of journalism as a mixture of success and

indifference (Carnegie, 2005). While some industry leaders viewed the role of journalism schools with indifference, they did feel traditional educational institutions could play a role in the emerging media environment. Industry leaders' suggestions were summarized in three key areas:

- “Emphasize the basics of the journalism craft, along with analytical thinking and a strong sense of ethics;
- Help reporters build specialized expertise to enhance their coverage of complex beats from medicine to economics, and help them to acquire first-hand knowledge of the societies, languages, religions, and cultures of other parts of the world;
- Channel the best writers, the most curious reporters and the most analytical thinkers into the profession of journalism” (Carnegie, 2005, p. 3).

While industry leaders emphasized ethics, understanding diverse cultures, and a desire for the best and brightest students, it is critically important for journalism schools to teach “the basics of the journalism craft” (i.e., mastery of writing and use of relevant technology). In addition to a poor job market, the Carnegie report suggests that the field of journalism is facing a crisis of ability rather than a lack of interest, manpower, or importance. The Carnegie (2005) study led to the Carnegie-Knight Initiative on the Future of Journalism Education. The initiative built on the idea that journalism was suffering from multiple ailments, including slow reaction to the impact of digital technology, the collapse of traditional economic models of journalism, and a need for better-trained journalists with a deeper understanding of the world (Carnegie-Knight, 2011). One of the major recognitions that came from the Carnegie-Knight Initiative (2011) was the need for journalism curricula to focus less on teaching one specific skill and more on preparing students to complete tasks that require multiple skill sets. The idea of journalism students being able to present information in multiple formats (i.e., text, audio, images, and

video), via multiple platforms, and using a variety of technologies has been labeled Backpack Journalism (Stovall, 2011). While Stovall (2011) emphasizes the importance of students becoming proficient with technology, he stresses that text (the ability to write) remains “the most important” tool for a new journalist (p. 210).

In July 2011, *the American Society of News Editors (ASNE) 2011 Industry Challenges and Opportunity Report* showed that news editors of both print and online news outlets felt the principal challenge they faced was maintaining quality writing and editing, especially given budget and staffing cuts. Almost 84 percent of responding editors said writing and editing quality are “very important” (ASNE, 2011). One surveyed editor said “The cornerstones of what journalists do remain[s] our single clearest consensus: quality writing and editing” (ASNE, 2011, par. 60). According to the *2010 Annual Survey of Journalism and Mass Communication Graduates*, most graduates said they have the writing skills needed to work in today’s media environment; however, half of the bachelor’s degree recipients said “they lacked some skill they needed for the job market, with web skills of various types dominating the list of needed skills” (Becker, Vlad, Kazragis, Toledo & Desnoes, 2010, p 1).

The need for journalism students to graduate with the ability to perform both writing and technology tasks is emphasized by the United States Department of Labor’s Bureau of Labor Statistics’ (2011) prediction of a moderate decline in journalism reporting and analysis positions through 2018. They also predict slow growth in editing-related jobs. Students with the most diverse skill sets should be the most competitive in the tight job market. “Competition will continue to be keen for jobs on large metropolitan and national newspapers, broadcast stations and networks, and magazines” (USDOL, 2011, Job outlook, par. 1). The report also predicts that improving technology will eventually leads to more employment opportunities in areas such as

online or mobile news divisions, which marrying strong writing and technological knowhow. Employment opportunities for new bachelor's degree recipients inched up in 2010, the first increase in two years (Becker, *et al.*, 2010).

After several years of economic and employment decline in the field of journalism, the 2011 Pew Research Center's Project for Excellences in Journalism's Annual State of the News Media report provides further insight into the emerging field of journalism and the skills journalism students need to focus on developing (Rosenstiel & Mitchell, 2011). Two sharp years of decline in the news industry ended for most media outlets, with the exception of traditional newspapers. "Among the major sectors, only newspapers suffered continued revenue declines last year—an unmistakable sign that the structural economic problems facing newspapers are more severe than those of other media" (Rosenstiel & Mitchell, 2011, par. 4). Other media rely more heavily on technology skills than do newspapers. According to Rosenstiel & Mitchell (2011), 1,000 to 1,500 newspaper newsroom jobs were lost the year preceding the study, leaving newspaper newsrooms 30% smaller than in 2000. Media outlets relying on technology, such as Web pages, to deliver their message grew in 2010. In 2010, every news platform saw audiences either stall or decline—except for the Web (Rosenstiel & Mitchell, 2011), a platform that requires both technological knowhow and strong writing skills. This shift to new media coupled with the decline in traditional media is somewhat paradoxical, as new media outlets struggle to produce content while relying heavily on traditional news sources, such as newspapers, to develop their content (Rosenstiel & Mitchell, 2011). Students shying away from journalism as a career choice confound this paradox.

The job market for graduates of journalism programs in the U.S. showed slow signs of growth in 2010 and the first half of 2011: "The improvements are tentative and the market has

not yet returned even to the level of two years ago” (Becker, *et al.*, 2010, p 1). Despite a lukewarm job market, stagnant salary and benefit growth, most journalism majors are pleased with the degree they chose (Becker, *et al.*, 2010, p 1), suggesting a more altruistic motivation for going into journalism.

A volley of news stories through 2009 proclaimed continued increases in enrollment in journalism schools and an interest in journalism as a career. Many state and private journalism schools saw increases over their 2008 enrollment. For example, the graduate applications have increased at the following schools: Columbia (38 %), Stanford (20 %), NYU (6 %), University of Colorado (11%), University of North Carolina (14 %), and University of Maryland (25%) (Streib 2009). Since 2000, undergraduate enrollment in journalism programs has increased by an average rate of nearly 4%, while annual enrollment in graduate programs has increased by an average rate of 5%; however, this increase is largely due to much higher enrollment in the first part of the decade (Renshaw, 2007). In the past two years, many schools have begun to see a decrease in enrollment (Becker, *et al.*, 2010).

### **Scope of Research Proposal**

The crisis in the field of journalism extends beyond the classroom and what journalism students are, or are not, learning. A shift in how news is delivered and consumed, a decrease in print publications, and the demise of many traditional, self-sustaining economic models of journalism have profoundly changed the industry. A pillar of good journalism, which has not shifted in the new media environment, is the need for journalism schools to produce students who have a mastery of the written language, passion, and critical thinking skills associated with quality journalism.

For years, social scientists have studied the field of journalism and the skills needed for

students to be successful as journalists. Given the current journalism job market; the desire of industry leaders to have well-trained, motivated writers who demonstrate the ability to think critically; and students' concerns about meeting the requirements of the changing journalism field, questions that focus on students' abilities, motivations, and preparedness to be journalists are even more apropos now than in years past. Thus, the purpose of this study is to identify experiences, background characteristics, learning strategies, and efficacy beliefs that play into the development of journalistic writing skills.

### **Related Literature**

Predicting students' success as future journalists requires a crystal ball not found in social-scientific research. What research can examine are the skills and behaviors most likely to lead to success in a journalism career. To that end, this study utilizes social-cognitive theory to identify the role of self-efficacy, experience, and motivation in becoming a future journalist. The study of self-efficacy and motivation can be informed by social-cognitive theory. Social-cognitive theory holds that people are active in creating the context of the social situation in which they find themselves, and they adapt their actions to be successful in the social context (Bandura, 1997). For example, in a class where points are awarded to students for participating in discussion, students who do not typically speak out in class might alter their behavior, by speaking out more, to ensure they earn the participation points and are successful in class. This participation thereby alters the social context of the environment. Human functioning is embedded in social conditions and cognitive regulation of consciousness (Bandura, 1997). Active consciousness involves intentionally accessing and deliberately processing information for selecting, constructing, regulating, and evaluating courses of action. Beliefs of self-efficacy and motivation directly relate to this process.

This study seeks to extend previous research that focused on journalism students' writing self-efficacy and the variables that affect their preparedness (Bissell & Collins, 2001; Collins & Bissell, 2002). The changing landscape of journalism in the last 10 to 20 years makes a replication and extension of the previous research an important contribution to the journalism/journalistic education literatures. In addition, motivations and strategies for success in journalism classes provide further insight into future journalists and journalism as a career.

### **Writing self-efficacy**

In 2001, Bissell and Collins looked at variables that predicted journalism students' success in writing. Viewing introductory journalism courses as a foundation for the development of more advanced skills, they suggested that understanding what makes students successful in introductory courses is important for two main reasons: 1. students often choose a career path or major based on their performance in an introductory course; and 2. students who struggle with the basic concept in an introductory course are also likely to struggle with subsequent courses (Bissell & Collins, 2001). "Such concerns take on greater weight when one considers the role college media writing courses play in preparing the next generation of professional journalists" (Bissell & Collins, 2001, p. 69). As students contemplate career choices, they are faced with a variety of new teaching strategies, skills, and expectations, which will help them prepare for or reconsider a career in journalism.

In this study, Bissell and Collins (2001, p. 72) asked students to fill out a questionnaire that examined "attitudes and experiences that could conceivably influence performance" on writing and/or grammar tests. Students then completed a grammar and writing measure. Each student was given a standard writing assignment, which was evaluated on a five-point scale, and a 20-sentence grammar test. They also found high-school journalism experience, college newspaper

experience, newspaper exposure, higher grade point average, and high self-efficacy to be predictors of abilities related to success in journalism classes. Bissell and Collins (2001) found a moderate, positive correlation between self-efficacy and writing, but not self-efficacy and ability to use grammar. Bissell and Collins (2001) concluded that this lack of correlation was due to students not being able to evaluate their own lack of ability in grammar use, possibly due to the lack of emphasis placed on proper grammar usage across classes at the high school and college level. Self-efficacy is conceptualized as individualized self-perception that can vary across activities, situations, and circumstances, rather than a goal to be achieved (Bandura, 1986).

Collins and Bissell (2002) followed up their work in identifying variables that would lead to success in journalism classes by trying to identify variables that might correlate with writing self-efficacy. They reported that previous journalism experience, students' predictions of their own self-improvement over a semester, regular class attendance, and exposure to news media predicted high self-efficacy. However, their measure of writing self-efficacy was questionable at best, with only five indicators testing self-efficacy and only three of those indicators focusing on actual writing tasks. While Collins and Bissell (2002) identified several variables they felt correlate with students' writing self-efficacy, their research did not look at students' perceptions of their own writing ability and their self-efficacy in relation to specific writing tasks. Bandura (1986) warns against basing self-efficacy measures on general questions rather than views of specific tasks, which Collins and Bissell did, calling the validity of their 2002 findings into question. Self-efficacy is not a goal that can be assessed by an omnibus test (Bandura, 1986). For example, in testing writing self-efficacy, asking general writing questions, such as the ones asked by Collins and Bissell (2002) (i.e., "I find the rules of grammar and usage confusing";

“Right now, I’m not a very strong writer”; and “I have a strong command of the English language”), do not measure efficacy of specific writing tasks. A more appropriate indicator would be “I am confident I can write a hard news story.”

This study seeks to more accurately test and answer Collins and Bissell’ (2002) question of what variables indicate high self-efficacy in writing, and to see what impact efficacy has on journalistic writing. Variables in this study are divided into four main areas. First are background variables, which consist of sex, reason for taking a journalism course (i.e., major, minor, or elective), anticipated field (i.e., journalistic-centric, journalistic related, or non-journalistic), and intrinsic motivation. Second, learning strategies and motivations including value for tasks performed in journalistic classes, ability to think analytically (i.e., critical thinking skills), and time/environmental management skills. Third, journalistic experiences focused on high-school newspaper involvement, high-school yearbook involvement, college media outlet involvement (i.e., college newspaper, radio station, news website, magazine, or other college media experiences), and journalistic class experience. Finally, efficacy is evaluated as grammar efficacy (perceived ability to produce grammatically correct writing), journalistic writing efficacy (perceived ability to produce journalistically correct writing), and overall writing efficacy (perceived ability to produce both grammatically correct and journalistically correct writing).

### **Background, learning strategies, and experience**

Sex, reason for taking the class, anticipated career field, and intrinsic motivation make up background variables in this study. While sex is predetermined, reason for taking the class, anticipated career field, and intrinsic motivation are more contextual. Reason for taking the class is based on whether students are a journalism major or minor, or if they are in the class as an elective. Another reason for taking the class is a student’s anticipated career field. Fields are

journalistic-centric, journalistic-related, or non-journalistic, and then broken down further into specific anticipated career choices. The area of journalism a student is studying, and the type career he/she is preparing for, can determine how he/she envisions the importance of journalism (both tasks and experiences). Intrinsic motivation often drives students to engage in tasks without any outside support or despite criticism from others (Harter & Connell, 1984). Intrinsically motivated students are often more determined, work to satisfy their own interests, and gauge their success by personal standards (Endres & Wearden, 1990). Students who are intrinsically motivated tend to self-regulate their learning experience (Pintrich, 1999), which includes utilizing learning strategies. Task value, critical thinking, and time/environmental management make up the learning strategies in this study. Task value (often viewed as an achievement motivation) is the value students place on specific tasks in their course work (Eccles, 1983); time/study and environmental management is students' ability to manage their environment and resources (McKeachie, Pintrich, Lin, & Smith 1986); and critical thinking is the ability to analyze information and apply knowledge to a situation beyond the scope of the learning environment (McKeachie, *et al.*, 1986).

*RQ1: To what extent do background (sex, reason for taking the class, anticipated career field, and intrinsic motivation) predict learning strategies (task value, critical thinking, and time/environmental management)?*

In addition to the impact background variables may have on learning strategies, background may also be tied to students' journalistic experience. Journalistic experiences are the past experiences where students performed journalistic tasks, such as high-school newspaper and yearbook experience, college media experience, and the experience students have in journalism classes.

*RQ2: To what extent do background (sex, reason for taking the class, anticipated career field, and intrinsic motivation) predict experiences (journalistic experience and current class)?*

Intrinsically motivated students often engage in tasks for the love of the experience and seek to master tasks for personal satisfaction (Dweck, 1986). Many high schools offer newspaper and yearbook electives, which allow students to be involved in a task and master the experience. Likewise, many colleges have newspapers, radio stations, websites, and magazines, which could provide outlets for intrinsically motivated students who are seeking personally fulfilling experiences.

*H1: Students with higher internal motivation have more high-school yearbook, high-school newspaper, and college media experience.*

Cranford (1960) and Weigle (1957) determined that high school newspaper experience was a factor in students pursuing journalism as a career in college. Journalistic experiences provide students an opportunity to test their ability and determine if journalism is a suitable career choice. Many students choose journalism as a major and a career based on their belief in their ability to write (Henningham, 1996). Past experiences offer students opportunities to evaluate their writing ability.

*H2: Students who are taking the course because it is required for their major have more high-school yearbook, high-school newspaper, and college media experience.*

### **Learning strategies and efficacy beliefs**

Students engage in goal directed behavior (i.e., learning tasks) because they believe the behavior will help them attain their goal (Bandura, 1986, 1989, 1993). Beliefs of self-efficacy are often based on students' feeling that they can attain a goal, or that they are skilled at a task

(Bandura, 1997). Applying learning strategies to writing tasks, with subsequent success in the writing tasks, should strengthen a student's sense of self-efficacy towards the writing tasks. In journalism classes, students learn both grammar skills and journalistic writing skills.

*RQ3: To what extent do learning strategies (task value, critical thinking skills, and time/environmental management) predict grammar self-efficacy?*

*RQ4: To what extent do learning strategies (task value, critical thinking skills, and time/environmental management) predict journalistic self-efficacy?*

Grammar and journalistic skills are very similar and are often taught together. Beliefs of efficacy are often based on students' beliefs they have mastered a task, positive feedback, positive vicarious experiences, and reduced mental stress towards a task (Bandura, 1997). The longer students are involved in skill development, the more subsequent success they experience and the deeper they internalize information, the higher their sense of efficacy towards a task (Pintrich & De Groot, 1990). The earlier students have experience in journalism (high school yearbook and newspaper) and the more journalistic experiences they have participated in, the higher their efficacy towards writing tasks should be.

*RQ5: To what extent do experiences (high school newspaper, high school yearbook, college media, and class) predict grammar self-efficacy?*

*RQ6: To what extent do experiences (high school newspaper, high school yearbook, college media, and class) predict journalism self-efficacy?*

As students progress through their journalistic course work, their opportunities to master grammar and journalistic writing tasks increase. Shell, Colvin & Bruning (1995) found that students' efficacy towards a subject increased each subsequent year that the student studied. As students advance through the journalism curriculum, the belief in their ability to write

grammatically correct journalistic work should increase.

*H3: Students who have taken more journalism courses have higher grammar self-efficacy.*

*H4: Students who have taken more journalism courses have higher journalism self-efficacy.*

### **Relationship between background, learning strategies, experience, and efficacy**

While a variety of studies have looked at the relationship between efficacy and actual writing ability, no studies have been found that examine the variables that strengthen writing efficacy related to journalistic tasks.

*RQ7: To what extent do background, learning strategies, and experiences predict writing self-efficacy (grammar and journalistic)?*

Several studies have found that sex plays a role in writing efficacy, where women usually hold higher efficacy beliefs than men (Eccles, Wigfield, Flanagan, Miller, Reuman, & Yee, 1989; Pajares & Valiante, 1997, 2001; Pajares, Miller & Johnson, 1999; Wigfield, Eccles, MacIver, Reuman & Midgley, 1991). Given that grammar is a cornerstone of overall good writing and that journalistic writing builds on good writing skills, it is expected that efficacy will again be higher in women than men.

*HQ5: Women have higher overall writing self-efficacy than men.*

### **Relationship between background, learning strategies, experience, efficacy, and actual ability**

Writing efficacy literature (Bruning & Horn, 2000; Graham Harris & Mason 2005; Pajares & Johnson, 1994; 1996; Pajares, *et al.*, 1999; Pajares & Valiante, 1997, 1999, 2001; Rankin, Bruning, & Timme, 1994; Shunk & Swartz, 1993; Shell, *et al.*, 1995; Shell, Murphy & Bruning,

1989; Wachholz & Etheridge, 1996; and Zimmerman & Bandura, 1994) suggests strong predictive power between writing efficacy beliefs and ability. Meier, McCarthy & Schmeck (1984) found that of all of the variables tested, efficacy was the strongest predictor of actual writing ability. However, other variables have been found to predict writing efficacy. Given the specific nature of journalistic writing, several variables may play a role in developing actual writing ability.

*RQ8: To what extent do background, skills, experiences, grammar self-efficacy, and journalistic self-efficacy predict actual writing ability?*

While students' self-efficacy, experiences, and learning strategies have been studied in a variety of ways, no literature has been found that examines the relationships among journalism students' experience, background, learning strategies, self-efficacy for writing, and motivation. This study expands the self-efficacy, writing self-efficacy, and motivation literature by looking deeper into students' study of journalism, their beliefs in their ability to write, their motivation, and the strategies they use to be successful in the classroom.

## **Review of Literature**

A variety of factors play into developing journalism students into professional journalists. Students undertake a variety of classroom and extracurricular activities as they pursue their goals of becoming journalists. Many of the skills, experiences, motivations, and learning strategies students undertake during their education are skills that are also desirable in professional journalists. A large body of research has examined ideas of efficacy, motivation, and learning. However, no literature has been found that adequately addresses these ideas in relation to journalistic writing education.

### **Social Cognitive Theory**

Both the concept of writing self-efficacy and motivation are rooted in social-cognitive theory. As a construct of social-cognitive theory, self-efficacy is viewed as an individual's perception of his or her ability to achieve in a given area (Bandura, 1986). Another aspect of social-cognitive theory is motivation and self-regulated learning (Pintrich, 2003). Students' motivation is linked to their ability to self-regulate their learning activities. Eccles & Wigfield (2002) explain self-regulated learning is being metacognitively, motivationally, and behaviorally active in one's own learning processes and in achieving one's own goals. This framework assumes motivation and learning strategies are not static traits of a learner, but that "motivation is dynamic and contextually bound and that learning strategies can be learned and brought under the control of the student" (Duncan & McKeachie, 2005, p. 117). Students' motivations change from course to course, depending on their interest in the course, efficacy for performing tasks in the course, and other social and environmental factors. Their learning strategies may vary as well, depending on the nature of the course (Artino, 2007).

In social cognitive theory, individuals: Are proactive and self-regulating rather than reactive and controlled by biological or environmental forces; are understood to hold self-beliefs that allow them to employ a measure of control over their thoughts, feelings, and actions; and display behaviors, motivations, and capabilities which are critical elements (Pajares, 2003). A social cognitive perspective of student learning suggests that each student engages in learning in his/her own way. Students engage in tasks and learning based on the motivation they feel towards a specific subject. For example, a student taking a journalism class as part of their major, likely has different motivations than someone who is taking the class as an elective and who only has a casual interest in the content. The context of a class, as it relates to each student, helps determine how the student approaches learning situations.

People make their way through complex, challenging situations by making good judgments about their capabilities, anticipating the probable effects of different events and courses of action, sizing up social opportunities, and regulating their behavior accordingly (Bandura, 2001). These are all cognitive activities students engage in during the course of a class, which is known as Bandura's (1986) model of triadic reciprocity. Using the interaction of personal attributes, external environment, and overt behavior, "forethoughtful, generative, and reflective capabilities are, therefore, vital for survival and human progress" (Bandura, 2001, p. 3). In this social cognitive view, people are not just under-goers of experience, but rather active agents of experience. Experience for the student is learning. To learn, students do not just sit in classrooms but rather engage the course material, instructor, and assignments. Through the aforementioned interaction, students gain knowledge, and learning has occurred.

Social cognitive theory suggests an emergent interactive agency model of experience (Bandura 1986, 1999, 2001). Cognitive processes emerge from the brain's activities and exert

influence on social experience (Bandura, 2001). Individuals do not just react correctively to negative experiences and errors but rather self-regulate to progress forward in situations (Bandura & Locke, 2003). Therefore, students are proactive in the classroom. Student engages in classroom tasks, thereby regulating their behavior to reach their desired goals. Students study, take notes, and ask questions to ensure progression towards their goal. The goal of education should be learning (i.e., the development of new knowledge structures).

Knowledge structures represent the rules and strategies of effective action and serve as cognitive guides for the construction of complex behavioral models. These knowledge models are the result of observational learning, exploratory activities, verbal instruction, and innovative cognitive synthesis of the acquired knowledge (Bandura, 1997), which are all learning tasks. As a journalism student studies course material, their knowledge structures towards journalistic writing skills grow and translate into ability to perform journalistic writing tasks. Bandura (1997) notes that knowledge structures translate into proficiencies. Then, cognitive models are guides for the production of skilled actions and internal standards for adjusting actions and behavior in developing proficiencies (Bandura, 1997). Proficiencies are then used in the contextual situations in which the student finds himself or herself. For example, knowledge structures could lead to proficiency in journalistic writing, which could be used in the context of a writing position for a magazine.

During the learning process, students engage in ongoing cognitive fluctuation. From a social cognitive perspective, thought mediates between knowledge and action. Students have a knowledge of their past success and failures, as well as material they have learned. Their past performance colors their beliefs concerning their ability to perform tasks in the future. Pajares (1996) notes the consistency of social cognitive theory with that of theorists who posit

that beliefs are a filter through which “new phenomena are interpreted and subsequent behavior mediated” (p. 544) (Abelson, 1979; Dewey, 1933; James, 1885/1975; Mead, 1982; Nisbett & Ross, 1980; Pajares, 1992; Posner, Strike, Hewson, & Gertzog, 1982; & Rokeach, 1960 & 1968). “Cognitive guidance is especially influential in the early and intermediate phase of skill development. Knowledge structures specify how appropriate sub skills must be selected, integrated, and sequenced to suit particular purpose” (Bandura, 1997, p. 34). When students engage in a learning process, early successes and failures impact their feelings of likely success in future endeavors. If a journalism student experiences early, successive failures in writing headlines, each subsequent attempt to write a headline will be dogged by concerns and doubt in ability. The opposite is also true. Successive achievement in headline writing should build a student’s confidence. Once mastery of a skill is reached, the completion of a task requiring that skill demands very little cognitive awareness and very few cognitive resources to complete. How people interpret the outcome of their deeds (reciprocal determination) both informs and alters their self-beliefs and environment (Bandura 1978, 1986; & Pajares, 1996). Given the importance of early skill development to subsequent successes, students should be instructed in a manor that allows for skill development, rather than failure, and students need to take active responsibility in contributing to their own academic achievement.

Social Cognitive Theory posits that individuals make underlying contributions to their own functioning through mechanisms of personal agency. Agency, actions that are intentionally done, enables people to play a part in personal self-development, adaptation, and self-renewal (Bandura, 1997, 2001). Personal efficacy beliefs, as a mechanism, comprise the key factors of agency. Among the mechanisms of agency, none have been found to be more central or pervasive than beliefs of self-efficacy (Green, 1985; McCarthy, Meier & Rinderer 1985; &

Nicholls, 1979; Paris & Oka, 1986; Shell, *et al.*1995). Knowledge structures based on previous successes build a student's belief that he/she can complete specific tasks. Literature suggests that beliefs of self-efficacy often determine actual success in a task.

### **Self-Efficacy**

Self-efficacy is an individual's belief in his or her capability to achieve a specific goal (Bandura, 2003). Perceived self-efficacy refers to belief in one's capabilities to organize and execute the courses of action required to produce a given attainment (Bandura, 1997). Self-efficacy refers to "task specific self confidences" and includes factors that might lead a person to be successful at a task, such as adaptability, creativity, resourcefulness, perseverance, and supposed aptitudes to complete complex actions (Latham & Locke, 1991). Efficacy beliefs are contextually bound. Just because a student holds high efficacy towards traditional writing, does not mean he/she will hold high efficacy towards journalistic writing. At a more micro level within journalistic writing, a student may hold high efficacy towards lead writing, but lack efficacy beliefs towards their ability to write Web summaries. A lack of efficacy can be a deterrent to a person's pursuit of mastering a task. If people believe they cannot produce a given result, through the aforementioned self-efficacy components, they typically will not attempt to accomplish the goal (Bandura, 1997). Given the sway efficacy holds on motivation to pursue a task, it is has been considered one of the more powerful mechanisms of agency in the social cognitive perspective.

Self-efficacy as a construct was proposed by Bandura (1977) and has been tested in a variety of fields, focusing on a variety of topics. The link to self-efficacy has been studied in phobias (Bandura, 1983), depression (Davis & Yates, 1982), social skills (Moe & Zeiss, 1982), assertiveness (Lee, 1983 & 1984), smoking behavior (Garcia, Schmitz, & Doerfler, 1990), pain

control (Manning & Wright, 1983), health (O’Leary, 1985), athletic performance (Barling & Abel, 1983; & Lee, 1982), and academic performance (Pajares, 1992; & Pintrich & Schunk, 1995). Self-efficacy has been shown to have a direct impact on a variety of tasks and activities across a variety of fields. Self-efficacy goes beyond the classroom and impacts people in a variety of contextual settings. “Perceived self-efficacy occupies a pivotal role in social cognitive theory because it acts upon the other classes of determinates. By influencing the choices of activities and the motivational level, beliefs of personal efficacy make an important contribution to the acquisition of knowledge structures on which skills are found” (Bandura, 1997, p. 35). Unless people believe they can produce desired effects by their action, they have little incentive to act. Efficacy beliefs, therefore, are a major basis of action. People guide their lives by their beliefs of personal efficacy.

“In social cognitive theory, a sense of personal efficacy is represented as propositional beliefs” that are “embedded in a network of functional relationships with other factors that operate together in management of different realities” (Bandura, 1997, p. 3). Self-efficacy beliefs are altered by the self-regulation of motivation, thought processes, affective states and actions, and changing environmental conditions (Bandura, 1986, 1989; Pintrich & Schunk, 1995). Within the context of performing a given task, a student’s perceptions, motivations, actions and behaviors change. A person’s self-efficacy is not universal, but rather individuals hold views of self-efficacy in regard to certain tasks. For example, a person’s confidence (self-efficacy) in their ability to write a short story does not mean that person will feel the same confidence in baking a chocolate soufflé, especially if they have been unsuccessful at baking in the past. An elevated sense of efficacy in one activity does not mean high self-efficacy in another area (Bandura, 1997;

Hofstetter, Sallis, & Hovell, 1990), and does not mean efficacy will consistently remain high towards a task.

Efficacy beliefs vary in three key areas: Levels, generality, and strength. Levels refer to the varying degrees of difficulty in achieving a task. For example, very few people would see turning a doorknob as difficult, and presumably the majority of people would hold a high self-efficacy belief in relation to performing this task. However, if you asked people about their confidence in removing a brain tumor, levels of self-efficacy would likely be lower, unless you were asking a brain surgeon. To capture the variance in efficacy, it is critical to allow respondents to choose among a variety of levels of efficacy (Bandura, 1997). If a student is presented the question, “Select yes, or no, do you believe you are a good writer?” the chances of getting an accurate picture of the level of the student’s efficacy is greatly reduced. However, if the student is presented a specific task and asked to rate their confidence in doing the task on a scale with multiple points, a much clearer picture of the level of their efficacy emerges.

Generality refers to the level of efficacy people hold when evaluating differing tasks. Again, a person’s high efficacy in one area does not mean that person will have high efficacy in another area. However, self-efficacy can be generalizable among tasks based on the degree of similarity between activities, the modality in which capabilities are expressed, qualitative features of a situation, and the characteristics of the person towards whom the behavior is directed (Bandura, 1997). A student who excels at traditional writing may excel at journalistic writing if they perceive the tasks to be similar to traditional writing. “Assessments linked to activity domains and situational contexts reveal the patterning and degree of generality of people’s beliefs in their efficacy” (Bandura, 1997, p. 43).

Finally, belief in one's self-efficacy varies in strength. While levels of self-efficacy refer to evaluating one's ability to complete a task, strength refers to the ferventness to which people believe in their ability. "Weak efficacy beliefs are easily negated by disconfirming experiences, where people who have a tenacious belief in the capabilities will persevere in their efforts despite innumerable difficulties and obstacles" (Bandura, 1997, p. 43). Returning to the example of writing leads, two students may struggle with the task. While one student may persist in efforts to write leads, due to a high sense of efficacy towards the task, the other student may level-out or get worse at writing leads, due to lower efficacy strength. Both low and falsely inflated levels of self-efficacy can be detrimental to learning (Schunk, 2003). Students with falsely inflated levels of self-efficacy run the risk of being overconfident and not employing the appropriate means needed to be successful (Bandura, 1989; Linnenbrink & Pintrich, 2003; Salomon, 1984; Schunk, 2003). A student who is overconfident in their ability to write a lead may not take time to learn proper structure, format, and rules for the journalistic writing task and may find him/herself in a tough position when the skills are demanded and they cannot actually produce the work. Students with low efficacy could also end up in a tough scrape if they did not apply effort to learning due to beliefs that they could not master the task. While strong efficacy leads to success, overly high or low efficacy can undermine the proper development of cognitive, social, emotional, and behavioral skills.

Efficacy is a generative means in which cognitive, social, emotional, and behavioral sub-skills should be organized and orchestrated to serve numerous purposes (Bandura, 1997). Successful task performance requires both skill and efficacy beliefs that one can meet the challenge. Continued improvement of sub skills are required to manage new situations, which contain uncertain elements. Self-efficacy beliefs go beyond simply predicting future

performance. People who have confidence in their abilities approach tasks as challenges to be met and overcome, rather than threats to be avoided. While the social cognitive perspective of efficacy is generally viewed as the most accepted explanation of how people view their own capabilities, other interpretive lenses have been focused at efficacy study.

**Alternate theory of self-efficacy.** It is worth noting White's (1959, 1960) proposal of a theory of self-efficacy. In this theory, motivation is conceptualized as an inherent need to effectively deal with an environment, rather than the social cognitive view of motivation as a goal. "The production of effects through exploratory activities builds competencies and is said to be satisfying in its own right" (Bandura, 1997, p. 13). Self-efficacy would grow as an individual accomplishes a task, knowledge grows, and the individual effectively masters the environment (White, 1959, 1960). However, Bandura, (1997) points out that White's theory of self-efficacy is problematic in that it is difficult to verify, it is circular in nature (i.e., mastery of a task is inferred by participation in a task), and a definition of the relationship between effectant motivation and mastery of environment is lacking. White's theory postulates a student should automatically master a task by the simple merit of being involved in the task. By that logic, a group of journalism students should be able to master brain surgery by going to a hospital and cutting open a patient's head. Whether the patient survived or the surgery was a success is irrelevant. Given the lack of gauging task mastery in White's theory, success is determined by participation, rather than completion or mastery.

In contrast to White's theory, the sociocognitive view of efficacy holds that choice, behavior, effort, and persistence are extensively regulated by beliefs of personal efficacy rather than by an effectance drive. In other words, students chose to engage in a task, rather than having an internal drive to pursue a task. "Because efficacy beliefs are defined and measured

independently of performance, they provide a basis for predicting the occurrence, generality, and persistence of behavior” (Bandura, 1997, P. 14). White’s theory was later articulated into a model of intrinsic mastery, rather than a theoretical explanation of self-efficacy (Bandura, 1997).

Self-efficacy has also been equated with outcome expectancy. However, perceived self-efficacy is a judgment of one’s own ability to accomplish a goal, whereas as outcome expectancy is a judgment of the likely consequences that will arise from achieving a goal (Bandura, 1997). Student may hold an efficacy belief (confidence in their ability to performs a task) concerning their journalistic writing ability, and may also hold an outcome expectation (i.e., belief their good journalistic writing will lead to a career in the field) concerning their journalistic writing. “An assured sense of efficacy supports the type of efficient analytic thinking needed to ferret out predictive knowledge from causally ambiguous environments in which many factors combine to produce effects” (Bandura, 1997, p. 35). Graham and Weiner (1996) conclude that self-efficacy has proven to be a more consistent predictor of behavioral outcomes than have other self-beliefs.

Given that White’s self-efficacy theory was adopted as a model of intrinsic mastery, and that students can hold efficacy beliefs and outcome expectancies towards the same task, alternative views of efficacy do have a place in research. However, the sociocognitive view of efficacy provides a more robust explanation of students’ beliefs concerning their abilities, and provides more predictive power towards actual abilities. Bandura’s articulation of the relationship of efficacy towards mastery of task and sources of efficacy provide a much clearer picture of the process students undertake as they enter a field of study and begin to master the skills required to enter a professional field.

**Primary sources of self-efficacy.** Bandura (1997) postulates that self-efficacy beliefs are built on four main sources of information: Enactive mastery experience that serves as indicators

of capability, vicarious experiences that alter efficacy beliefs through the attainments of others, verbal persuasion and allied types of social influences that one possesses certain capabilities, and physiological and affective states from which people partly judge their capabilities, strengths and vulnerability to dysfunction. “People acquire information to appraise efficacy from their performance accomplishments, vicarious (observational) experiences, forms of persuasion, and physiological indexes” (Schunk, 1991, Self-efficacy theory, Par. 2). A student in a journalism class should gain confidence when he/she masters an experience, such as writing a proper headline. This source of efficacy would be a performance accomplishment or enactive mastery experience. A student may see their fellow classmates doing well in headline writing and gain a feeling of efficacy based on the success of others. This is a vicarious source of efficacy. A student who is praised by his teacher for excellent headline writing skills is receiving persuasive efficacy. As a student writes headlines and becomes less apprehensive towards the task, their physiological and affective states relaxes and they gain a sense of efficacy towards the task.

Mastery experiences are crucial sources of efficacy. In these experiences, people succeed or fail, and their level of success or failure plays a role in developing self-efficacy beliefs. Mastery of experiences is widely accepted as the strongest predictor of self-efficacy (Hampton, 1998; Klanssen, 2002; Lent, Brown, Grover, & Nijjer, 1996; Lent, Lope, & Bieschke, 1991, Lent Lopez, Brown, & Gore, 1996; Lopez & Lent; 1992; Matsui, Matsui, & Ohnidhi; 1990; Pajares, Johnson, & Usher; 2007; & Usher & Pajares, 2006). Many factors play into mastery of experience including: people’s perceptions of their own capabilities, the perceived difficulty of a task, the amount of effort that must be exerted to complete a task, the external help a person receives, the circumstances under which the task must be completed, an individual’s pattern of previous successes and failures in similar tasks, and the way these experiences are cognitively

organized in a person's mind (Bandura, 1997; Pajares, 2003). Given that efficacy judgment includes more than just completing a task, all of the aforementioned factors make up a person's efficacy beliefs in relation to a given task. For example, when approaching a task such as writing a Web summary, people already have notions about their abilities to summarize information, correctly write the sentences, and adhere to journalistic style. Through a series of social interactions, they negotiate a self-identity that includes self-efficacy towards the task.

The difficulty of a task determines the self-diagnostic value of success and failure for judging personal efficacy. Easy tasks are often redundant and require no re-evaluation of efficacy. For example, a journalism student should have no trouble writing a byline—a simple, redundant task—but may struggle in constructing a good lead. However, students who perceive writing a lead as difficult will reappraise their efficacy of the task with each subsequent success in writing a good lead. While success builds a strong sense in one's self-efficacy, failure undermines such a belief. If a failure occurs repeatedly, or before self-efficacy is established, it can undermine the development of a sense of self-efficacy (Bandura, 1997). This is not to say that people who have low efficacy in overcoming obstacles cannot overcome failure and develop efficacy in a difficult area. For example, a student who struggles with spelling, but works to diligently overcome the obstacle, could eventually develop a strong sense of confidence in spelling, thereby having high self-efficacy toward spelling tasks. "Difficulties provide opportunities to learn how to turn failure into success by honing one's capabilities to exercise better control over events" (Bandura, 1997, p. 80).

In addition to perceived difficulty of a task, environmental context often affects efficacy. A student in a classroom setting who only writes a good lead following intense help from the instructor is not likely to gain efficacy in one's ability to write leads. "Successes achieved with

external assistance carry little efficacy value because they are likely to be credited to external aids rather than to personal capabilities” (Bandura, 1997, p. 83). For this reason, it is crucial for teachers to point students towards success, but not hand them answers. For example, a student writing an in-depth news story does not gain efficacy if their teacher tells them who to interview, conducts the interview, writes the majority of the story, and corrects all of the errors. Conversely, a teacher who suggests sources, helps the student evaluate interview questions, provides feedback on the students writing, and helps the student identify errors, is more likely to build efficacy, based on enactive mastery, in the student.

While enactive mastery is the most influential source of efficacy information, individuals rely on other sources for efficacy information as well. When a person sees or visualizes another person, who is viewed as similar, performing a desired task, self-efficacy beliefs can increase (Bandura, 1986). Through vicarious experiences, individuals’ self-efficacy beliefs can increase as they observe their peers being successful. To place this into the context of a journalism classroom, students struggling with constructing stories in an inverted pyramid style may experience increased self-efficacy beliefs towards this task as they observe their classmates being successful in this task. The converse is also true: Observers’ self-efficacy beliefs would be reduced if they witness their peers repeatedly failing at a task (Brown, & Inouye, 1978).

Another outside influence on self-efficacy is that of verbal or social persuasion. While social persuasion is often limited in its ability to create higher self-efficacy beliefs, it can serve to persuade a person that he or she possesses the capabilities to complete a task (Bandura, 1986). If a student is told she/he can complete a task, the person is more likely to employ greater sustained effort than if he/she holds self-doubts about her/his ability. While Chambliss and Murray (1979) note that efficacy built on persuasion is more likely in people who have a legitimate reason to

believe they can produce an action. Bandura (1986) warns that raising unrealistic efficacy beliefs of personal ability often leads to failure when the influenced individual cannot meet the inflated level of efficacy. While teachers should encourage their students to overcome challenge, the teacher must have a realistic understanding of their students' skills. Assuring a student he/she will be able to produce a final journalistic Web package at the end of a semester, when all of the work up to that point would indicate otherwise, could prove detrimental to the student. The student may be confident in their ability when in actuality their work is subpar. Inaccurate verbal persuasion can lead to a student having unrealistic physiological and affective states.

An individual's physiological and affective states are the final common source contributing to self-efficacy. People rely on "somatic arousal in stressful situations as ominous signs of vulnerability to dysfunction" (Bandura, 1986, p. 401). A student with low self-efficacy towards journalistic writing will hold more feelings of stress towards journalistic writing assignments. When stress is eliminated in a situation, students' self-efficacy increases (Bandura & Adams, 1977; Barrios, 1983). Put simply, the more nervous a student is about achieving a task, the less efficacy that student will hold towards completion of the task.

While some inconsistencies in findings concerning vicarious experiences, verbal persuasion, and physiological and affective states exist, most variations in findings can be explained away due to the contextually sensitive nature of self-efficacy (Pajares *et al.*, 2007). That is to say, students gain or lose efficacy based on vicarious experiences, verbal persuasion, and physiological and affective states concerning one task, when the sources of efficacy really address another task. An example of such contextual bound, inaccurate efficacy growth is a student who sees another student does well at writing leads, and the first student then gains a vicarious sense of efficacy toward their ability to write a headline. Efficacy beliefs should be

bound directly to a task that is being performed, and should help students determine their course of action concerning that task.

Individuals' sense of efficacy often influence the course of action chosen, the amount of effort dedicated to an activity, the time dedicated to an activity, a person's level of perseverance over obstacles and failures, resistance to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and how much depression is experienced in coping with tasking environmental demands, and the level of accomplishments they realize (Bandura, 1997). A student who builds journalistic efficacy through many, or all, of these sources should be well positioned for the field of journalism. The development of efficacy beliefs towards specific journalistic writing tasks better prepare students for the field, as journalists often dedicate large amounts of effort and time to a single story, may have to overcome obstacles and adversity, and often work in stressful environments. While there is a lack of quality research into journalistic writing efficacy, efficacy has been studied in a variety of other areas.

**Self-efficacy as a field of research.** Multiple studies have looked at the cause/effect nature of social cognitive theory, and specifically at the question of do efficacy beliefs contribute to human function? A variety of methods and analytic approaches have been used to answer the question of efficacy's contribution to function (Bandura & Locke, 2003). Self-efficacy has been studied in work-related performances (Sadri & Robertson, 1993; Stajkovic & Luthans, 1998), behavior in children and adolescence (Holden, Moncher, Schinke, & Barker, 1990), academic accomplishment and determination (Multon, Brown, & Lent, 1991), health functioning (Holden, 1991), athletic presentation (Moritz, Feltz, Fahrbach, & Mack, 2000), and perceived collective efficacy in group performance (Gully, Incalcaterra, Joshi, & Beaubien, 2002). "The evidence from these meta-analyses is consistent in showing that efficacy beliefs contribute significantly to

the level of motivation and performance” (Bandura & Locke, 2003, p. 87). These studies show that efficacy does have an effect on actual ability. The relationship between efficacy and ability is evident across a variety of fields and disciplines. Studying journalistic writing offers a new context in which to evaluate efficacy’s impact on ability.

The majority of self-efficacy studies conducted in an academic setting have focused on three areas. First, the link between efficacy beliefs and college majors and career choice (Pajares, 1996, & 2003) shows career choices influenced by efficacy beliefs are most prevalent in science and mathematics (Hackett, 1995). Second, efficacy beliefs held by teachers and their relationship to instructional methods and student performance show that teachers feel a stronger sense of efficacy based on their students achievements (Pajares, 2003; Tschannen-Moran, Woolfolk, Hoy, & Hoy, 1998). Finally, the relationships among efficacy beliefs, related psychological constructs, and academic motivation reveal that students’ self-efficacy beliefs are often associated with other motivators, performances, and achievements such as outcome expectance, perception of task importance (task value), anxiety, performance assessments, self concept (a more generalized form of self efficacy), and achievement (which is sometime viewed synonymously with efficacy (Pajares, 1996, 1997, 2003).

Pajares (2003) notes that several studies have found positive correlations between writing self-efficacy, perceived value of writing, writing apprehension, self-efficacy for self-regulation, and previous writing performances and writing achievement. However, multiple regression and path analyses show that only self-efficacy and performance assessments were significant predictors (Pajares & Johnson, 1996; Pajares & Valiante, 1997, 1999, 2001; & Pajares, Miller, & Johnson, 1999), a reason to focus on writing self-efficacy and its role in the preparation of future journalists. While a variety of studies have examined students’ views of their efficacy, this study

specifically draws from the body of existing research that focuses on students' beliefs of self-efficacy concerning their ability to write as well as in-class motivation.

**Writing self-efficacy.** Pajares (2003) identifies three popular assessments of writing self-efficacy, which have been used in a variety of studies. These assessments are: 1. The assessment of a student's confidence that he/she possesses specific writing skills, such as an ability to perform grammar, usage, composition, and mechanical writing skills (McCarthy, Meier, & Rinderer, 1985; Meier, McCarthy, & Schmeck, 1984; Pajares & Johnson, 1994, 1996; Shell, *et al.*, 1995; Shell, *et al.*, 1989); 2. The assessment of students' self-efficacy of their ability to complete holistic writing tasks, such as writing a term paper, short story, or letter (Pajares & Johnson, 1994; Shell *et al.*, 1989, 1995); and 3. "evaluating the appropriateness and adequacy of a self-efficacy measure requires making a theoretically informed and empirically sound judgment that reflects an understanding of the domain under investigation, its different features, the types of capabilities it requires, and the range of situations in which these capabilities might be applied" (Pajares, 2003, p. 144). The first type of writing assessment evaluates students' confidence in their ability to display specific skills related to writing a story. Tasks in this area of skills might include: Developing a plot, telling about a main character, or describing a setting (Graham & Harris, 1989); or identifying skills specifically identified by teachers as appropriate to their student's writing level (Pajares, *et al.*, 1999; Pajares & Valiante, 1997 & 1999). In the third assessment, understandings can be used to evaluate an efficacy measure by the level of specificity of its items, the range of task demands that it includes, and the correspondence between the beliefs that are studied and the outcome that is measured (Pajares, 2003).

As early as 1975, Daly and Miller (1975) described writing anxiety as writing apprehension, and found that it correlated with SAT verbal scores, perceived likelihood of

success in writing, a motivation to take writing courses, and even career choice. Writing apprehension, which often correlated with writing performances, is canceled out when self-efficacy beliefs are controlled (Pajares et al., 1999; Pajares & Valiante, 1997, 1999, 2001). The study of writing self-efficacy is important to the field of journalism, due in part to the importance of strong writing in the field; and due to writing self-efficacy's well documented predictive ability towards writing success (Bruning & Horn, 2000; Graham & Harris, 2005; Pajares & Johnson, 1994; 1996; Pajares, *et al.*, 1999; Pajares & Valiante, 1997, 1999, 2001; Rankin, Bruning, & Timme, 1994; Shunk & Swartz, 1993; Shell, *et al.*, 1995; Shell *et al.*, 1989; Wachholz & Etheridge, 1996; and Zimmerman & Bandura, 1994).

Early studies into self-efficacy and its relationship to writing performance were typically conducted on college undergraduates. Meier *et al.*, (1984) looked at the predictive nature of efficacy in writing tasks and a variety of variables, including deep processing (cognitive and anxiety), sex, race, English entrance exam (ACT) scores, and locus of control, to determine their relationship. The authors found that efficacy expectations did predict writing performance and that cognitive and affective variables and outcome expectations are related to both the amount and accuracy of efficacy beliefs. They also found that writing self-efficacy belief was a better predictor than the ACT in predicting success in writing. McCarthy *et al.* (1985) proposed a new model of writing self-evaluation based on self-efficacy. The focus of their research was to determine whether the “strengths of efficacy expectations related to quality of writing” (McCarthy *et al.*, 1985, p. 466). Of the possible predictors of writing performance, only strength of perceived efficacy demonstrated a statistically significant effect (McCarthy *et al.*, 1985). Shell, *et al.* (1989) studied the relationship between self-efficacy and outcome expectancy beliefs and achievement in reading and writing and found a high curvilinear correlation between writing

outcome expectancy and writing achievement. However, this relationship was not statistically significant. Shell *et al.* (1989) found a significant, positive correlation between students' self-belief in their writing skills and their overall scores on writing essays. Efficacy towards writing ability has been shown to predict actual writing ability. Journalism students' efficacy towards journalistic writing should predict ability to produce journalistic writing. If so, the development of efficacy towards journalistic writing could be a key component in training journalism students for success in the field of journalism, a domain specific style of writing.

Writing self-efficacy beliefs are significant predictors when studies focus on domain-specific writing self-concept (i.e., journalism) and skills-specific writing self-efficacy (Pajares *et al.*, 1999). While domain specific writing self-efficacy predicts higher capability of writing, when low self-efficacy beliefs are included in statistical models the students' perceived value of writing is nullified (Pajares *et al.* 1999; Pajares, & Valiante, 1997, 1999; Shell *et al.*, 1989). If so, a student who holds high efficacy towards journalistic writing should demonstrate talent in the area, while a student who doubts their ability should demonstrate low ability in journalistic writing.

The relationship between writing efficacy beliefs and actual writing has been tested between sex and in a variety of age groups and, has consistently been shown to predict ability better than other variables (Collins and Bissell, 2002; Kim & Lorschach, 2005; Pajares and Johnson, 1994; Pajares & Johnson, 1996; Pajares & Valiante, 1999). Rankin, *et al.* (1994) delved into self-efficacy in relation to ability to spell, a key process in writing, and found self-efficacy to be the strongest predictor of performance. Shell, *et al.* (1995) found that writing self-efficacy increased each subsequent year, which supports Bandura's (1986) postulation that higher self-efficacy is directly correlated with improvement in both cognitive and behavioral skills (Shell *et*

*al.*, 1995). Therefore, as a student continues to study an area, progresses through a curriculum, and participates in additional contextually bound experiences, his/her self-efficacy in said area should increase as long as he/she continues to study and gain knowledge. If so, students who are ending their journalistic class work and who have engaged in developing knowledge structures towards good journalistic writing should have high efficacy towards journalistic writing and should be able to demonstrate good journalistic writing ability. Proficiency in journalistic skills should be the goal of journalism students.

Schunk & Swartz (1993) conducted a pretest and two experiments to ascertain the relationship between goal setting and progress feedback and self-efficacy and writing achievement. The pretest assessed the self-efficacy of 60 fifth-grade students in five areas of writing (i.e., perceived ability to: generate ideas, decide on the main idea, plan the paragraph, write the topic sentence, and write the supporting sentences). In the first experiment, Schunk & Swartz (1993) gave the students three writing related goals (a process goal, a product goal, and a general goal), with half of the children receiving periodic feedback on their progresses towards learning the strategies. The second experiment focused on transfer of achievement outcome. In both experiments, self-efficacy was highly predictive of writing ability, regardless of whether children received positive feedback during the process (Schunk & Swartz, 1993), or had high or low writing apprehension (Wachholz & Etheridge, 1996).

Writing apprehension is the tendency to approach or avoid situations that could require a level of evaluated writing (Daly & Wilson, 1983). Writing apprehension is negatively related to writing self-efficacy (Pajares & Johnson, 1994). Students' feelings of both comfort or dread of writing were fed by previous success or failure in writing, previous preparation, prior writing assessment experiences, and current writing skills (Wachholz & Etheridge, 1996). The authors

found that students who held high writing efficacy beliefs tended to perform better in writing samples, while students with low writing efficacy, which was the result of poor writing skills and a lack of previous positive writing experiences, tended to avoid situations that would require evaluation of their writing ability. If so, students with low journalistic writing efficacy would likely avoid journalistic writing intensive courses, which would open them up to evaluation of their work. Students enrolled in journalism courses and who hold low journalistic writing efficacy face a greater challenge to learning.

A lack of efficacy towards a task has a negative impact on students (Wachholz & Etheridge, 1996). Many students equated low grades on assignments with a personal assault, suggesting that they felt a poor grade is a larger reflection on them as a person, thereby causing a block to learning and overall low confidence. A student who turns in a story to their teacher and then receives back a heavily edited copy could view the experience as a failure, instead of an opportunity to learn, thereby lowering their interest in learning and their overall efficacy towards the journalistic writing. While low efficacy leads to discouragement and lack of interest, a strong sense of efficacy leads to greater interest in writing, attention to writing, stronger effort, and greater perseverance and resiliency in the face of adversity (Pajares, 2003). Feelings of efficacy help students to reach their academic goals. Zimmerman & Bandura (1994) employed path analysis and found writing self-efficacy influenced overall academic self-efficacy, personal standards for quality of writing, and the amount of effort exerted to facilitate mastery of writing skills. If so, the development of journalistic writing efficacy will not only aid students in journalistic writing task attainment, but students will likely have higher standards for writing excellence and higher confidence in academic as a whole. These feelings of efficacy help students self-regulate their learning behaviors and goals.

Boekaerts & Rozendaal (2007) sought to understand self-regulation of writing skills in secondary vocational education. The authors found that writing efficacy beliefs have a complex effect on students' metacognitive strategies, which is supported by Pajera's (2003) assertion that past writing experiences, both success and failures, play into the cognitive views students hold towards their writing abilities and the effort they put into improving skills. The higher the student's efficacy towards journalistic writing, the more the student values journalistic writing skills. Higher judgments of self-efficacy lead to a student placing a higher value on a task or course (Bandura, 1986). A student who, based on previous success, has high efficacy towards journalistic writing, and employing varying learning strategies and mental exertions to further improve his/her journalistic writing skills, does so because of the value they see in the task. Students who excel at journalistic writing should find value in the coursework and employ learning strategies that will ensure their success.

While a large portion of the body of writing self-efficacy research has focused on the predictive nature of writing self-efficacy, recent research has looked at factors that affect self-efficacy, and at how self-efficacy plays out in different groups. Andrade, Wang, Du, & Akawi (2009) suggest that using a rubric (a tool which provides students assignment guidelines and feedback) boosts efficacy in students (Arten & McTighe, 2001; Quinlan, 2006, Ross, 2006; Schunk, 2001). While Andrade, *et al.* (2009) did find a slight increase in writing self-efficacy in the middle school students who used a rubric, the increase was not statistically significant. Walker (2003) suggests fostering self-efficacy in students by giving them choices in learning activities, encouraging strategic thinking, providing for self-evaluation, and changing the assessment context (i.e., alternatives to traditional tests). If so, the use of a variety of writing assignments, with clear, concise evaluation criteria, could aid journalism students in the

development of their journalistic efficacy. In addition to controllable factors, which can impact efficacy, researchers have also looked at the impact of sex, race, and disability on writing efficacy.

Several researchers have studied relationships between sex and writing self-efficacy. Research conducted on elementary and middle school age children supports higher self-efficacy beliefs in girls than in boys (Eccles *et al.*, 1989; Pajares & Valiante, 1997, 2001; Pajares, *et al.* 1999; & Wigfield, *et al.*, 1991). Research on high school students reveals that boys hold stronger self-efficacy beliefs than girls (Pajares & Johnson, 1996). High school girls appear to experience a drop in academic motivation and/or engage in less “self-congratulatory” tendencies that impact perceptions of self-efficacy (Bruning & Horn, 2000; Phillips & Zimmerman, 1990; Wigfield, Eccles, & Pintrich, 1996), possibly because of a perceived masculine form of discourse in the classroom (Cleary, 1996). Many researchers have found inconsistencies in sex differences in self-efficacy. Inconsistencies have been attributed to differences in how the sexes perceive academic activities (Pajares & Valiante, 1999, 2001; Schunk & Meece, 2006).

When you control for previous achievement, the differences in writing self-efficacy between the sexes seem to disappear (Pajares & Valiante, 1999; Pajares *et al.*, 1999). While research to date has not controlled for it, there is also a possibility that girls and boys use a different mental metric in evaluating their self-efficacy (Noddings, 1996); thus, measures need to be more sensitive to issues of self-belief, gender roles, and stereotypes (Schwarz, 1999). To determine what effect external frames of reference (perception of ability in relationship to other students) have on self-efficacy beliefs, Marsh, Walker, & Debus (1991) asked students to provide writing self-efficacy judgments in traditional manners and in relation to their writing ability versus peers in their school. This study showed that differences in rating measures used

did not matter, and that girls consistently consider themselves better writers than boys. Overall, the veracity of the perceived differences between boys and girls leading into adulthood appear to be an artifact of the measurement techniques and the way they are socialized to view themselves as well as compare themselves to others.

Researchers have also looked at writing self-efficacy in relation to race and ethnicity. Hispanic high school students experienced more writing apprehension and were found to hold substantially lower writing self-efficacy beliefs than that of non-Hispanic, White students (Pajares and Johnson, 1996). While minority students report lower writing self-efficacy, they also report positive math efficacy (Edelin & Paris, 1995), a finding that seems consistent with beliefs that math and English/writing require different skill sets. Research supports cross-cultural generalizability of self-efficacy theory (Banduras, 2006) with students in more collectivistic cultures having weaker self-efficacy beliefs, yet they perform better in writing exercises than do students in Western cultures. (Oettingen & Zosuls, 2006). Research had examined writing in one's native language and studies support a negative correlation of writing self-efficacy to writing apprehension (Daly and Wilson, 1983, Onwuegbuzie, 1999; Pajares & Johnson, 1994). The findings for the role of culture (particularly collectivistic vs. individualistic) are mixed when it comes to the relationship between writing self-efficacy and performance.

García & de Caso (2006) expanded the literature concerning writing apprehension in students with learning disabilities and found, by examining the impact of a program that included the incorporation of Bandura's (1997) four sources of self-efficacy, that in all but one of the tested variables, the experimental group yielded higher scores than did the control group. García & Fidalgo (2008); García & de Caso (2006); and García-Sanchez & Fidalgo-Redondo (2006) conducted similar studies on students with learning disabilities and were met with similar

outcomes. Efficacy beliefs towards writing remain a strong predictor of actual ability. Sex appears to play a role in the development of efficacy, but results in this area are somewhat unclear. Efficacy beliefs are universal, in that they are not limited to one culture or country, although they do sometimes payout in different ways, depending on the collective nature of the society. Stimulating sources of efficacy also clearly has a positive effect in both students with and without disabilities.

Journalism teachers may want to consider focusing on the strengthening of efficacy beliefs towards journalistic writing. Providing students opportunities to master journalistic writing skills, in an environment that fosters journalistic writing efficacy will encourage students to succeed and should produce students with strong journalistic writing skills. Given that efficacy has been shown to predict ability across a variety of fields and educational settings, the development of journalistic writing efficacy should lead to better trained journalists, who have better mastery of journalistic writing, are better equipped to overcome difficult situations and adversity, and who value journalistic writing tasks. As students transition in the field of journalism, high journalistic writing efficacy should make them more confident in their overall ability in a journalistic career.

### **Self-efficacy and career**

Several variables play into both education towards, and choice of, a career path. Lent, Brown, & Hachett (1994) frame the formation and elaboration of career-relevant interests, the selection of academic and career options, and the performance and persistence in educational and occupational pursuits with a social cognitive perspective. This frame builds on Bandura's idea of personal agency (i.e., self-efficacy, expectation outcome, and goal mechanisms) and their interactions with other variables, such as sex, support system, and experiential/learning factors. If

so, students who excel at journalistic writing skills in college should transition into journalists with excellent journalistic writing skills. High performance in academics, subsequent performance and occupational aspirations have all been linked to self-efficacy (Bandura, 1997; Bandura, Barbaranelli, Caprara & Pastorelli, 2001; Eccles & Wigfield, 2002). For example, a student who holds high efficacy beliefs towards their ability to write for a college's magazine is likely to gain more pleasure and satisfaction from the task. The student may then try to transition their positive college experience into a career in the same area. Much like the predictive power of self-efficacy towards writing ability, self-efficacy is a strong predictor of career choice (Betz & Hackett, 1981; Hackett & Lent, 1992; Multon, *et al.*, 1991; Sadri & Robertson, 1993). Many students begin journalistic endeavors in high school and college and much of this early work is done for pleasure (i.e., high school newspaper and yearbook involvement). However, these experiences provide students with early efficacy building opportunities, in which they begin to craft their ability and interest in journalistic writing.

**Preparation for Journalism as a career.** The current research seeks to understand how past experience, education, and background play into future journalists' beliefs in their writing ability. The majority of research that looks at journalism education, in relation to preparing for a career in the field, is several decades old. Enrollment decreases in journalism schools in the 1950s and dramatic increases in enrollment in the 1960s and 70s led to a small body of research into journalism as a career choice (Peterson, 1986).

Weigle (1957) conducted one of the first studies looking at why students choose journalism as a career and found that students viewed journalism as less lucrative, less glamorous, and less secure, with fewer job options and more pressure than other fields. However, students who chose journalism as a career often had done so before leaving high

school (Cranford, 1960; Weigle, 1957). Similar studies with high school students show consistent perceptions of journalism as a career: Low pay, low prestige, long hours, high pressure, low monotony reward, and intense competition, all dissuaders from students selecting a career in journalism (Kimball & Lubell, 1960; Lubell, 1959). Despite the negative view of journalism as a career choice, the majority of students did view journalism as an important function to society (Fosdick & Greenberg, 1961; Kimball & Lubell 1960; Lubell (1959). Even though students did not see journalism as a lucrative career, they felt like there was value in journalistic task and endeavors.

Discovering more altruistic motivation for the selection of journalism as a career, Bowers (1974) surveyed journalism majors who ranked journalism as highly useful to society and one of the least lucrative fields available. “The early literature on student’s attitudes towards journalism as a career showed two important trends: students viewed journalistic work basically negatively, but they had a positive attitude about the *mission* of the field” (Endres & Wearden, 1990, p. 29). More recently, Endres & Wearden, (1990) found that students designating themselves as print journalists primarily selected the field due to its contribution to society and its credibility with the public; radio/television majors cited credibility with the public and advancement possibilities as reasons for their choice; and advertising and public relation students felt the field offered good pay and promotional opportunity, or good pay and contribution to society, respectively. Neither print nor radio/television students saw the field of journalism as a lucrative career choice. “Print news students think their field is ethical, has public credibility, allows them to work autonomously, and has a variety of challenging assignments” (Endres & Wearden, 1990, p. 30). Conversely, public relations students saw their field as high paying with promotion opportunities, and comfortable work environment, while radio/television students saw their field

as highly creditable, yet highly unethical (Endres & Wearden, 1990). Despite the negative association with a career in journalism, students find value in the field.

In an effort to better predict the niche (i.e., public relations, journalism, or radio/television) in which media students might be successful, Ivey & Peterson (1965) conducted the Kuder Preference Record—Vocational (KPR-V) interest test with 108 graduate students. The test indicated slight differences in students in the three areas of media studies. Radio/television students were significantly more artistic and musical, journalism students were more literary turned, and public relations students were more persuasive. When considering each of these fields, the results are logical. Television production and radio offer a more creative venue and connection to music, while one of the goals of public relation professions is to be persuasive. Journalism students were more literary, which entails telling stories and sharing information through writing. Many students chose journalism as a major due to their ability to write (Henningham, 1996). The majority of the recent literature focusing on student perceptions of journalism as a career has moved away from early high school experience and areas of interest, to a more contextually bound research. That is not to say that information found in more focused studies is not valuable to the larger study of the field of journalism.

The context of current research often focuses on journalism in specific countries, or in relation to sex and oppression. For example, Emenyeonu (1991) notes that the traditional stereotype of female Nigerian journalism majors was that they picked a degree that was easy, just to complete college, and that they had no interest in a career in journalism. However, the author found that despite sex barriers and stereotypes, the majority of female students chose the field out of a genuine interest in a career in journalism and desire to work in the media field. Issues of sex in the field of journalism have also been studied in Australia and New Zealand, where

Densem (2006) and Pearson (2009) compared the views of teenagers in Australia and New Zealand towards the increase in female journalists in the countries. The authors found no significant results and noted that their results are highly contextually bound and were drawn from a narrow sample.

The study of journalism as a career choice offers a variety of future research options. Literature in this area is sketchy at best. Existing literature does suggest that many journalism students discover journalism as a possible career choice at an early age, and that despite a variety of negative perspectives towards the field, many students are motivated to pursue a career in the field. Given the perceptions of low pay and prestige and high stress and bad work environments that students hold towards journalistic careers, it begs the question, what motivates students towards journalistic skills, tasks, and undertakings?

### **Motivation**

While this current research takes a social cognitive view of motivation, it is important to note the vast body of literature upon which current motivation research builds. Early research into motivation drew from Plato and Aristotle's views that the mind was comprised of knowing, feeling, and willing (cognition, emotion, and motivation respectively) and that the act of using the will (volition) mirrored a person's desires, wants, and purpose (Pintrich & Schunk, 1995). Motivation has been viewed as an intrinsic function (McDougall, 1926), psychical energy (Freud, 1966 & Heidbreder, 1933), a products of conditioning (Pavlov, 1927, 1928; & Skinner, 1953), a driving force (Woodworth, 1918), a system (i.e., motivation is the initiation of learned patterns of movement behavior) (Hull, 1943), a drive for incentive, (Crespi, 1942, & Hull, 1943, 1951, 1952), an acquiring drive (Miller, 1948), goal directed purposeful behavior (Tolman, 1932), cognitive maps (Tolman 1932) & Tolman, Ritchie, & Kalish, 1946), the central instigator

of action (Mower, 1960), emotional arousal (James, 1884, 1890, Lange, 1885, Hebb, 1949, Schachter, 1964; Schachter & Singer, 1962), a field of conflicting force (Lewin, 1935, 1936), a means to restore balance (Heider, 1946), and an actualizing tendency (Rogers, 1963).

To best understand what drives student, it is necessary to have a clear definition of motivation. Motivation in this study is viewed through a sociocognitive perspective, in which motivation is goal directed behavior that is undertaken based on the context of the learning situation. Motivation informed by a social cognitive perspective assumes that motivation and learning strategies are not static traits of the learner, but rather that “motivation is dynamic and contextually bound and that learning strategies can be learned and brought under the control of the student” (Duncan & McKeachie, 2005, p. 117). If so, according to social cognitive theory, a journalism student engages in academic behavior that will allow the student to reach the goal of being an educated journalist.

Given the vast interpretations, theories, and perspectives on motivation, the concept has turned into a field of study all to itself (Pintrich & Schunk, 1995). Three perspectives of academic motivation rely on constructs of expectancy. The first focuses on the role of students’ expectations for academic success and the student’s perceived value for academic tasks. This perspective is based on a general organism-centric view based on personality and social physiology (Pintrich & Schunk, 1995; see Eccles, 1983; Eccles *et al.*, 1989; Wigfield, 1994; Wigfield & Eccles, 1992 for examples). The second expectancy–centric perspective of motivation focuses on the development of children’s perceptions of competence. This model also has an organism perspective, but takes cognitive development into account as well (Pintrich & Schunk, 1995, see Harter, 1982; Phillips & Zimmerman, 1990; & Stipek, 1981 for examples). Essentially, this perspective still views motivation as happening within an organism structure

such as a college classroom as a student moves towards the goal of completing a task, but it also takes into account the cognitive attributes the participant brings to the table. The final model of motivation applies the social cognitive construct of self-efficacy to achievement. While the self-efficacy model of motivation is drawn from expectancy, much like the two previous models, the self-efficacy model draws more from the “mechanistic metatheoretical” perspective of its social cognitive roots (Pintrich & Schunk, 1995).

All three models have been successfully used in research, however the first two models do not rely on efficacy as construct. Given this study’s focus on efficacy beliefs towards writing, the third model provides the best framework of understanding, given that it is based on social cognitive theory. In social cognitive theory, self-efficacy and motivation are closely related.

**Motivation and self-efficacy.** The perspective that self-efficacy and motivation are closely related and bound through social cognitive theory informs this research. “Motivation is the process whereby goal-directed activity is instigated and sustained” (Pintrich & Schunk, 1995, p. 4). Beliefs of personal self-efficacy regulate motivation by shaping aspirations and the outcomes expected for one’s efforts (Bandura, 1997). Expectancy is the idea that individuals choose to engage in a task if they expect to succeed, but will not if they expect to fail (Eccles & Wigfield, 2002). If so, a student is unlikely to engage in editorial column writing if the student perceives a lack of accolades, accomplishment, or respect as a result of the endeavor (i.e., failure). This is different than a lack of efficacy. A lack of efficacy would be if a student did not write an editorial column because the student felt a lack of ability to produce such journalistic work. Students hold efficacy judgments of their capabilities, skills, and knowledge to master material, and also have outcome expectations, which normally correlate positively (Pintrich & Schunk, 1995). If so, a journalism student may determine not to write an editorial column based on

perceived lack of ability and belief that the column would be poorly received, or viewed as subpar work. While low self-efficacy and low outcome expectancy go together, so do high self-efficacy and motivation.

Highly motivated students are interested in learning, hold high levels of self-efficacy towards tasks, positive expectancy, put forth effort to succeed, persist, and utilize effective tasks and cognitive strategies (Pintrich & Schunk, 1995). A student who holds high efficacy beliefs towards editorial writing should hold no reservations about such a journalistic endeavor, and employ the strategies and skills necessary to reach their goal (i.e., completion of the editorial). The student would also likely expect a positive reception to the editorial. In the face of a negative outcome, the student should be able to overcome obstacles and criticism. Most expectancy models (Eccles 1987; Eccles 1983; Wigfield & Eccles 1992; & Feather 1988) link achievement, persistence, and choice with expectancy-related and task-value beliefs (Eccles & Wigfield, 2002). If so, the more value a student places on a task, such as editorial writing, the more likely the student will persist in writing the editorial. Motivation is a process of goal directed behavior, and students engage in a variety of task to reach their goals.

Motivation is a process, not a product, and is observed indirectly through inference from behaviors, choices, tasks, efforts, persistence, and verbalizations (Pintrich & Schunk, 1995). If so, a journalism student who is taking advantage of critiques of their work from their teachers, rewriting stories, studying Associated Press style, and learning to write modestly and concisely, is displaying characteristics of motivation. Motivation requires goals, activity (physical or mental), instigation, and sustained effort (Pintrich & Schunk, 1995), or beliefs, value, and goals with action (Eccles & Wigfield, 2002). A student who wants to learn to write journalistically but never engages in journalistic study is not motivated. It is not enough to think about a goal.

Motivation can include mental activity, but must conclude with action that brings the goal to fruition. Given the contextual nature of efficacy, motivation that is focused towards a specific area builds efficacy in that area.

Specific, proximal, and challenging goals inspire self-efficacy and improved performance (Bandur, 1997; Shunk, 1990). A student who is motivated to learn how to write Web summaries, and displays motivation towards the goal of becoming a proficient Web summary writer should experience improved skills and a higher sense of efficacy towards the specific skill. Students' self-efficacy beliefs are the primary factor of academic motivation as self-efficacy influences the remaining factors of motivation (Pajares, 2003; Pintrich & Schunk, 1995; Schunk, 1989).

Motivation is goal-directed behavior driven by beliefs about possible outcomes of action and self-efficacy for completing an action (Bandura's, 1986, 1989, 1993). Students with a goal tend to experience a sense of self-efficacy towards the task and engage in activities that will help them attain the goal. Self-efficacy grows as learners see progress towards their goal and they gain new skills in an area. As self-efficacy increases, motivation is sustained and skills improve further (Pintrich & Schunk, 1995). Goals and positive action are key predictors of motivation, which positively impacts self-efficacy. The idea that motivation is goal driven is seen in academic settings.

Academic motivation is comprised of task goals and achievement goals, both of which are the reasons students do academic work (Urdan, 1997), and are often described in terms of performance-approach or performance-avoidance orientations (Pajares, 2003). Task goals represent students' desire to master material, seek challenges, and learn as an end in itself. If so, a student might engage in learning journalistic writing because they enjoy the work. A student who is focused on the task is not concerned with outside evaluation or feedback. Performance-

approach goals represent students' concern with wanting to do well so as to display their ability (Pajares, 2003). A journalism student approaching learning from a performance approach wants to demonstrate their proficiency in journalistic writing. Performance-avoidance goals represent students' concern with wanting to do well so as to avoid showing a lack of ability (Pajares, 2003). A journalism student approaching learning from this perspective does not want to be shown lacking skills. The student is concerned with outside appraisal. These approaches to learning are not mutually exclusive. For example, a student may engage in journalistic writing because they love the task, because they want to demonstrate their ability to perform the task well, and because they do not want to appear deficient in their writing ability, thereby falling short of their educational goal.

The strong connection between efficacy and motivation is clear. As students engage in motivated behavior, they gain knowledge, skills, and work towards their goals. While mastering their goals, they also develop a belief in their ability to perform the specific task, which is the focus of their goal. As efficacy increases, students are more motivated and engage in more motivated behavior. This somewhat circular cycle requires students to regulate their actions and behaviors in a way that helps them reach their goals. Once a goal is reached, the skill should be based on a solid knowledge structure, which the student should be able to access with very little cognitive exertion.

**Self-regulated learning.** Self-regulated learning is the employment of learning strategies that students use to regulate their thought processes and manage their resources (Pintrich, 1999). Self-regulated learning is facilitated through the implementation of mastery and relative ability goals, high self-efficacy, and high task value beliefs. Self-efficacy and self-regulation have been shown to positively correlate in a variety of educational settings such as studying, classroom

experiences, and test preparation (Pintrich, 1989; Pintrich, 1999; Pintrich & De Groot, 1990; & Pintrich & Garcia, 1991). Both cognitive and metacognitive learning strategies have been identified as important elements in self-regulated learning (Garcia & Pintrich, 1994; Pintrich, 1988a,b; Pintrich, 1989; Pintrich, 1999; Pintrich & De Groot, 1990; Pintrich & Garcia, 1991; & Pintrich, Smith, Garcia, & McKeachie, 1993).

Both cognitive and metacognitive learning strategies involve cognitive resources, such as attention and long-term memory and are goal-directed, intentionally invoked, and effortful. However, cognitive learning strategies are not universally applicable, but rather situational specific, while metacognitive strategies are more universal, through focus upon planning for implementation, monitoring, and evaluation (Schraw, 1998). A cognitive learning strategy is illustrated through a student placing value on a class task, such as headline writing, while a metacognitive learning strategy is illustrated by a student placing value on journalistic education as a whole. Both are important strategies for the journalism student, as one focuses on specific skill development and the other focuses on overall goal attainment. Students' perceived self-regulatory skills often predict the self-assurance with which they approach academic tasks (Pajares, 2003), and greater strategy use, higher intrinsic motivation, more adaptive attributions, and academic achievement (Pintrich & De Groot, 1990), all of which lead to goal attainment. Learning strategies are diverse and are utilized in different ways in different situations.

Common cognitive strategies that help students succeed in the classroom are rehearsal, elaboration, organizational strategies, task value, and critical thinking (McKeachie, *et al.*, 1986; Pintrich, 1989, 1999; Pintrich & De Groot, 1990; Weinstein & Mayer, 1991). Resource management is the final leg of self-regulated learning and includes strategies used to manage and control environment, such as time, effort, study environment, and other people, (through help-

seeking behavior) (Corno, 1986; Pintrich, 1999; Ryan & Pintrich, 1998; Zimmerman & Martinez-Pons, 1986, 1988). “In line with a general adaptive approach to learning, these resource management strategies are assumed to help students adapt to their environment as well as change the environment to fit their goals and needs” (Pintrich, 1999, p. 462). Through the employment of learning strategies, students regulate their behavior and engage in motivated behavior that they deem as valuable in reaching their overall educational goals.

This current research is concerned with intrinsic motivation, task value and strategies for learning associated with motivation: time/study and environmental management abilities, and perceptions of ability to think critically. Intrinsic motivation task value and the aforementioned learning strategies are found in individuals who demonstrate self-regulated learning and were chosen due to their alignment with the characteristics media industry leaders look for in journalists (Carnegie, 2005).

**Intrinsic goal orientation.** Intrinsic motivation, which is synonymous with mastery-goal pursuit (Dweck, 1986), is motivation to engage in an activity for no other reason than participation in the task itself. People who are intrinsically motivated enjoy the participation in the task (Eccles & Wigfield, 2002 & Pintrich & Schunk, 1995). “Students characterized by this pattern tend to display positive affect, flexible and adaptive strategy use, and deep cognitive engagement in the task. They will tend to persist at difficult problems and learn from their mistakes” (Seifert, 2004, p. 146). A journalism student who enjoys journalistic writing is more likely to engage in learning tasks, apply appropriate strategies to master the task, and do well in class. Working on a task for intrinsic reasons is often more enjoyable and often leads to higher learning and achievement (Boggiano, Main, & Katz, 1988; & Gottfried, 1985, 1990). If a student finds the task fun or

enjoyable, they are likely to perform better. Efficacy increases in individuals who are intrinsically motivated.

Harter & Connell (1984) note that intrinsic motivation is characterized by several traits: First, intrinsically motivated students demonstrate a preference for a challenge, rather than easy work. An intrinsically motivated journalism student should enjoy the challenge of learning journalistic writing tasks. Given the challenges facing journalists today, enjoyment of challenging work should serve a journalism student well as the student transitions into the field of journalism. Second, intrinsically motivated students prefer to satisfy their own interests and curiosities, rather than those of others, such as teachers. This independent bend is also observable in the third characteristic of intrinsically motivated student, who seeks independent mastery attempts rather than dependent ones. Intrinsically motivated students are well suited to work alone and are comfortable determining their own goals and interests. Again, both a defined sense of curiosity and independent mastery are skills that will be beneficial to a student entering the field of journalism. Finally, intrinsically motivated students prefer independent judgment, rather than reliance on outside judgment and internal criteria for success and failure, rather than focus on outside sources of evaluation. Intrinsically motivated students have an internal sense of success and failure and they base their judgments on their own knowledge and experiences, rather than the input of others (Harter & Connell, 1984).

Students who are intrinsically motivated have a sense of competence and self-determination that leads to the pursuit of mastering a task for the gained knowledge (Bandura, 1993; Seifert, 1997; Seifert & O'Keefe, 2001). Students who display intrinsic goal orientation also hold generally high self-efficacy towards academics (Pintrich & De Groot, 1990; Seifert, 2004) and ability to self-regulate learning activities (Harten & Connell, 1984; Pintrich, 1999).

While intrinsically motivated students possess skills that are viewed as generally positive in academic learning, there are some drawbacks to intrinsic motivation.

A drawback to intrinsic goal orientation is that persistence in the face of obstacles is more difficult. Given the task interest and enjoyment of effort associated with intrinsic goal orientation, effort in the face of uncertainty can be experienced as aversive. Concern over goal attainment can overwhelm any intrinsic interest a person may hold towards a task (Ames, Ames, Felker., 1977; & Bandura & Dweck, 1985). Performance goals (extrinsic goal orientation) can create conditions that undermine intrinsic interest (Deci & Ryan, 1980; Lepper & Greene, 1978; Maehr & Stallings, 1972; & Ryan, Mires, & Koestner, 1983). Pajares & Valiante (2001) and Pajares *et al.*, (1999) found that the motivation of task goals in writing is positively related to writing self-efficacy, while motivations of performance-approach goals are negatively related to writing self-efficacy. If so, an intrinsically motivated student should hold high efficacy towards journalistic writing tasks that they view as a valuable, while they may hold lower efficacy towards journalistic writing that is done for evaluation purposes. This is worth noting in an educational setting. Intrinsically motivated students are likely to do better on journalistic class assignments that involve real interviews, news, and events, than they might on stories that involve fictional facts, and are only written to fulfill a class assignment. Extrinsic goal orientation undermines the implementation of learning strategies (Pajares, 1996). Students are less likely to employ learning strategies and motivated behavior when performing tasks that are not of intrinsic value.

### **Learning strategies and task value**

An individual's perception of the importance of a task (attainment value), their personal interest in a task (intrinsic value), their perception of the future usefulness of a task (utility

value), and negative perceptions of participating in a task (cost value) are the elements of task value (Battle, 1966; Eccles, 1983; Feather, 1988; Rokeach, 1979). The importance of a task refers to an individual's belief that a task is significant for them (Pintrich, 1999). In a classroom setting, a student needs to see a task as valuable to their learning experience. The interest in a task refers to an individuals like or dislike of a task (Pintrich, 1999). A student may see a task as important, but not see it as interesting. Utility is the individual's belief that the task is useful to them, either in their major, in getting through school, in future courses, or future vocations (Pintrich, 1999). Finally, cost is the negative aspect of engaging in a task (Pintrich, 1999). If a student does not see the value in a task, they may not engage in the task.

**Task value.** Task value is based on incentives or reasons for engaging in an activity (Eccles & Wigfield, 2002). For a journalism student, if they do not see the value in grammar exercises, they may complete them, but they may not internalize the knowledge. Task value correlates well with the use of self-regulated learning strategies (Pintrich, 1999) and feelings of self-efficacy (Pintrich, 1989; Pintrich & Garcia, 1991; Pintrich *et al.*, 1993). Students who value their coursework feel the course's tasks provide them personal benefit. In an academic setting, benefit would be advancement towards graduation (a goal,) and belief in the abilities to perform tasks (efficacy). Students often engage in environmental factor management while in pursuit of their educational goals.

**Time/study and environmental management.** Time/study and environmental management strategies are drawn from resource management tasks that assist students in managing their environment and resources (McKeachie, *et al.*, 1986). Again, given the limited resources and time journalists have to complete their task, a student's ability to manage these variables may provide insight into the success of students as future journalists. These strategies,

both cognitive and metacognitive, help students adapt to and change environmental factors to be more successful (Sternberg, 1985).

Time management, a classic area of study, is not only important to journalists, but also an important aspect of self-management for students (Thomas & Rohwer, 1986). A journalism student who is engaging in regulated learning activities has to be cognizant of time constraints. The student has a limited amount of time to dedicate to each class and each class task, therefore must budget their time as a resource. Environmental management is also critical to student's success and is an important aspect of study. It is important for students to have a defined area of study, which the student recognizes as set apart for study (McKeachie, *et al.*, 1986). Students often work in limited, distracting spaces. A journalism student who trains him/herself to set aside space to work will not only increase their academic success, but will also develop skills which will allow them to set aside workspace in a variety of professional journalistic environments. A journalistic environment could be working in a newsroom, or writing in a bombed out hotel in a warzone. Both time and environmental management skills should be desirable in future journalists.

**Critical thinking.** Given the need for journalists who can think analytically (Carnegie, 2005), the learning strategy of critical thinking should help students advance through course work, and should provide them valuable skills as professional journalists. Thinking critically differs from learning a skill or gaining knowledge. While learning is often the result of instruction in a classroom, critical thinking is applying knowledge to a situation beyond the scope of the learning environment (McKeachie, *et al.*, 1986). For a journalism student this could be applying standards of appropriate journalistic behavior to a new situation. For example, students should learn it is wrong to take a bribe. The students might then apply that knowledge to

a situation where they are offered an incentive, such as free concert tickets, to determine if accepting the tickets is appropriate. There are two main views of the concept of critical thinking. The first, is a broad definition which equates critical thinking with more general thought processes, and the second, a more narrow definition, which considers critical thinking a thought process of its own. The later is the more accepted view in academia (Yinger, 1980). A student applying knowledge they gleaned in a previous educational experience to a new experience illustrates the later. Halpern (1984) notes the importance of critical thinking due to the vast amount of knowledge and potentially devastating outcomes, such as nuclear holocaust, associated with not thinking critically.

Chaffee, (1985) identified several characteristics of students who think critically, all characteristics beneficial to journalists. First, students make active use of intelligence, knowledge, and skills. Journalists are required to actively engage in information, knowledge and skills to produce journalistic work. The development of these knowledge skill bases is the outcome of journalistic education. Second, students who think critically work through problems on their own and are not just told what to think. Journalists must constantly evaluate information from leads and source and determine the news value of the information. Third, students who think critically carefully consider and explore situations and are open to new and alternative ideas. Again, on a daily basis, journalists consider information and report on topics of varying interest. Openness to new ideas is illustrated in journalists who cover stories from a neutral perspective, rather than being closed to the information and insisting on imposing a personal slant on the story. Finally, students who think critically are able to base and support ideas on fact and are able to clearly articulate ideas. Journalistic writing should always be grounded in fact and

articulated professionally and clearly. Critical thinking can be applied to several aspects of both student and professional journalistic life.

Critical thinking involves abilities in addition to certain dispositions, brought to bear in identifying, clarifying and focusing a problem; analyzing, understanding and making use of inferences, logic, and value judgments; and determining the validity and reliability of the assumptions, sources of data or information (Pithers & Soden, 2000). Critical thinking deepens a student's understanding of issues and uses intelligence and cognitive engagement to solve problems and make decisions (Organ, 1965; Weast, 1996; Young, 1980). If so, a journalist who learned that he/she should not run the name of a minor accused of a crime, might also apply that same knowledge to not identifying the name of a minor in a story about sexual abuse. Critical thinking, problem solving, or reasoning typically refers to students applying their learning in a new situation to solve problems, reach decisions, and make evaluations with respect to standards of excellence (McKeachie, *et al.*, 1986). Standards of excellence are often based on knowledge gained in the classroom.

Yinger (1980) identified knowledge and experience, intellectual skills and strategies, appropriate attitude, and thinking environment as factors that affect critical thinking. Knowledge and experience is possessing enough knowledge and being involved in enough situations to have a mental base of facts, concepts, principles, and ideas to evaluate new ideas and concepts. These are often educational experiences and extra-curricular experiences which strengthen the student's knowledge base (i.e., high school or college media experience). Intellectual skills and strategies refer to being able to mentally manipulate and process information and attitude and disposition refers to a temperament to seek knowledge related to a subject. A student identifying a lack of knowledge and then seeking resources to bridge their knowledge gap illustrates this. For

example, a journalism student might not know the correct format for the name of a ship, but the student would seek resources to help them learn the correct formatting. Finally, the thinking environment either facilitates or inhibits the ability to think (Yinger, 1980), which ties into the importance of study and classroom environment management. If students are constantly bombarded with distractions, it is harder to stay focused on a train-of-thought.

Applying learning strategies to motivated behavior increases the likelihood of success in the journalistic classroom and in future endeavors. Learning strategies are often tied to motivation and efficacy development. As students seek to master a task (the goal), they employ self-regulated learning and determine the learning strategies that will best help them reach their goal. As the students work towards their goal, successive achievements and improvement through the regulated learning strategies builds higher self-efficacy.

While a large body of literature addresses efficacy and motivation, none has been found that specifically delves into these constructs in relation to journalistic writing. Efficacy has been found to be a strong predictor of both traditional writing and type-specific writing. A variety of motivations, experiences, and learning strategies impact how students learn, how they reach their goals, and the development of their efficacy beliefs. Many of these strategies and motivators are highly desirable in future journalists, and are fostered in early journalistic experiences. Given the predictive nature of efficacy towards ability, further examining the relationship of these variables should expand the journalistic writing literature.

## Methods

To address the research questions and hypotheses posed, this study surveyed students in four successive journalism courses in a large, well-established journalism program. Students answered questions that assessed their writing and grammar self-efficacy, motivation, and strategies for classroom success. Students also provided a writing sample, which was used to assess actual writing ability, details concerning their media experiences, and demographic information. This information was used to assess the relationships among a student's background experiences, skills and motivation, efficacy, and writing ability.

## Sample

A survey of students (N= 679) in four undergraduate journalism cohorts was conducted at a large, Southeastern university in the United States. A cohort consists of students at the same level in the journalism program. For example, students who are completing the introductory communication course are cohort No. 1, while students completing the fourth journalism class are cohort No. 4. Given this study's focus on students' motivations, writing self-efficacy, and actual writing ability, this is an appropriate sampling population. Several studies have used similar sampling universes when seeking students' perspectives on classes, skills, motivation, and career choices (Bissell & Collins, 2001, Collins & Bissell, 2002; Gibson & Hester, 2000; Linnenbrink & Pintrich, 2003, Pintrich; 2003; Shell, *et al.*, 1989). A link to the online survey was distributed in each cohort class at the end of a fall semester.

The information and skills gained by students in each cohort class are designed to build on the information and skills gained by the students in the previous class. According to the class descriptions in the university catalog, the first of the four journalism classes offers an introduction to the college of communication and focuses on human, mass, and mediated

communication. Students should gain an understanding of professional options open to those earning degrees in this field. The second cohort class is for students who specifically want to explore the field of journalism and electronic media. The second class includes a history of media and overview of media platforms. Students are introduced to theories and research in media and society. They should learn about the broad scope of journalism and media and begin working for one of the college's on-campus media outlets, which exposes them to journalistic writing practices. The third cohort class focuses on developing journalistic skills. In this class, students should learn the basic forms of writing for all media, how to work in a professional media environment, and basic grammar, style, structure, media practices and technology, as well as Associated Press Style for print and broadcast. The fourth cohort class focuses on the process of covering a variety of news events and stories. Students are introduced to general assignments, enterprise, beat reporting, and ethical journalism practices, including Internet-based research tools, interviewing, and other news gathering techniques. Students also work with several technologies related to journalism, such as computers, digital cameras, audio- and video-recording devices, content management and social media content.

A total of 679 students were invited to participate in the study (See table 1). While 554 students attempted the survey, only 462 completed the online questionnaire, for a response rate of 81.6% and a completion rate of 66.3%. Students in cohort No.1 (N = 185) were near completion of at least one required core course for the university's journalism program; students in cohort No. 2 (N = 86) were near completion of at least two required core courses for the university's journalism program; students in cohort No. 3 (N = 132) were near completion of at least three required core courses for the university's journalism program; students in cohort No.

Table 1

## Study Participants by Cohort

Cohort	Total Enrolled	Total Participating	Percentage of Cohort Participating	Percentage of Sample Participating
1: College Intro	228	185	81.1%	33.4%
2: Major Intro	196	86	43.9%	15.5%
3: Writing	159	132	83.0%	23.8%
4: Reporting	96	59	61.5%	10.6%
No cohort reported		92		16.6%

4 (N = 59) were near completion of at least four required core courses for the university's journalism program; 92 students failed to indicate to which cohort they belonged.

### Demographics

Slightly more than 34% (N = 155) of respondents were male and 65.6% (N = 295) were female. Well over half (58.3%, N = 323) of respondents said the course was required in their major, while 7.9% (N = 44) said the course was required for their minor, 15 % (N = 88) said the course was an elective, and 18.8% (N = 104) failed to answer the question. Of the valid responses, the majority of students saw themselves working in a traditional journalism field (i.e., print, broadcast, Web, or radio); while many saw themselves working in a media-related field such as photo journalism, documentarian, missionary journalism, media law, film, or video production; and other anticipated a field not related to media or journalism, such as medical

Table 2

## Careers Anticipated by Students (N = 450)

	<i>N</i>	Percentage
Print media	45	10%
Web media	39	8.7%
Radio	17	3.8%
Broadcasting	118	26.2%
Public relations	128	28.4%
Communication studies	5	1.1%
Advertising	17	3.8%
Media related field	26	5.8%
No field chosen	28	6.2%
Non-journalism related field	27	6%
Total	450	100%

professional, sports, or had not selected a field (See Table 2). Just less than 14% (N = 76) of respondents were 18 years old, 27.8% (N = 125) were 19 years old, 28.7% (N = 129) were 20 years old, and 12.9% (N = 33) were 21 years old, while the remaining 13.8% (N = 29) respondents were 22 to 52 years old. While all students indicated college journalism class experience, 78.9% (N = 355) reported high-school newspaper experience, 75.3% (339) reported high-school yearbook experience, and 59.8% (N = 269) reported college media experience.

## Procedure

Students in each cohort were invited by their section instructor to participate in an online survey. A flyer was given to students that explained the focus of the study, the students' involvement and time commitment (15 to 20 minutes), and how to contact the researcher if they had questions. The flyer also provided the URL for the online survey and the completion deadline. Instructors posted the flyer to the class's online Blackboard Announcement section and were asked to e-mail it to their students as a reminder. The survey was open from November 14<sup>th</sup> to November 29<sup>th</sup>. Instructors sent students a survey reminder e-mail November 24<sup>th</sup>. The survey was administered online through the university's online survey system. The opening page included an informed consent statement where the students acknowledged they were at least 18 years old and willingly consented to participate in the survey. Once a student answered all of the survey questions, she or he was directed to enter a university ID to claim extra credit. To protect students' identities, any identifying information was removed by the university's IT department prior to downloading the data.

The survey included: Demographic and previous journalistic experience questions; the Modified Writing Self-Efficacy Scale and a writing sample question (Shell, *et al.*, 1989), and scales from the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia & McKeachie., 1991) (See Table 3). The SPSS Statistical program was used to run Pearson Correlations, ANOVA, linear regressions, and stepwise regression to analyze the relationships among variables.

Table 3

## Reliabilities of Scales

Scale	Original scale	Scale used in this study
Writing efficacy scale (Shell, <i>et al.</i> , 1989)	A 16 item Likert scale with values from 0-100, which yielded a Cronbach's alpha of .92	An 11 item Likert scale with values from 0-10, which yielded a Cronbach's alpha of .916
Grammar efficacy scale (Shell, <i>et al.</i> , 1989)	An eight item Likert scale with values from 0-100, which yielded a Cronbach's alpha of .93	A nine item Likert scale with values from 0-10, which yielded a Cronbach's alpha of .951
Actual writing ability (Shell, <i>et al.</i> , 1989)	A five item grading criteria with values from 0-15, which yielded a Cronbach's alpha of .75	A five item grading criteria with values from 5-27, which yielded a Cronbach's alpha of .976
Goal orientation (Pintrich, <i>et al.</i> , 1991)	A four item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .74	A four item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .811
Task value (Pintrich, <i>et al.</i> , 1991)	A six item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .90	A six item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .94
Time/Study management (Pintrich, <i>et al.</i> , 1991)	An eight item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .76	An eight item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .777
Critical thinking (Pintrich, <i>et al.</i> , 1991)	A five item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .80	A five item Likert scale with values from 1-7, which yielded a Cronbach's alpha of .872

**Instruments**

**Writing self-efficacy scale.** The writing-self-efficacy scale developed by Shell, *et al.*, (1989) was modified and used to better test overall writing self-efficacy and self-efficacy in journalistic writing. Respondents were asked to identify their confidence in being able to complete a variety of specific writing tasks and their ability to use proper grammar and style. In academic settings, self-efficacy instruments usually ask students to rate their confidence to solve specific problems (Hackett & Betz, 1989), perform specific reading or writing tasks (Shell, *et al.*,

1989 & 1995), or take on specific self-regulatory strategies (Bandura, 1989). Self-efficacy should be assessed concerning specific tasks by using specific criteria in a specific domain (Schunk & Pajares, 2004). “Self-efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the critical task being assessed and the domain of functioning being analyzed” (Pajara, 1996, p. 547).

To evaluate the self-efficacy of students in regard to their ability to produce journalistic writing, the Modified Writing Self-Efficacy Scale (See Appendix A) was used. The modified scale is based on Shell, *et al's*. (1989) Writing Self-Efficacy Scale, and was modified to include five writing tasks more relevant to journalistic writing skills. For example, students were originally asked to rank their ability to perform tasks such as “write a letter to a friend or family member,” “list instructions for how to play a card game,” and “compose a will or other legal document.” The new questions focusing on journalism skills are: “write a hard news story,” “break a news story on Twitter,” “write a feature story for a print or Web publication,” “write a Web summary news story,” and “write a news headline.” In addition, the statement “Correctly use AP (Associated Press) style in writing” was added to the component skills subscale of the writing self-efficacy measure, which measures grammar efficacy (See Appendix B). The questions “compose an article for a popular magazine such as Newsweek” and “write a letter to the editor of the daily newspaper” were included in Shell, *et al's* (1989) original Writing Self-Efficacy Scale and were retained in the modified writing scale due to their focus on journalism-related tasks.

To determine whether the modified scale was appropriate for use in the current study, the 20 items were subjected to principal components factor analysis with varimax rotation. Criteria for retaining items on a factor were eigenvalues greater than 1.0 and 60/40 loadings (must load

with at least .60 on one factor and not more than .40 on any other factor). In this case, the 60/40 criterion is conservative, but appropriate because the scale was subjected to varimax rotation and the goal was to find the purest items (McCroskey & Young, 1979). The results of this analysis revealed a three-factor solution that explained 71.72% of the variance. See Table 4 for the factor analysis numerical results. The three-factor solution loaded in a predictable manner with factor 1 representing journalistic tasks, factor 2 representing grammar/stylistic tasks, and factor 3 representing the general task items from the original scale. Two items did not meet the initial 60/40 loading criterion (write a letter to the editor and use AP Style). Because writing a letter to the editor could be considered something that both a journalist and a citizen might do (the two factors it loaded on), it was retained on the journalistic subscale as it loaded above .6 there and makes sense as a journalistic item. Correctly use AP Style is such a critical part of the theoretical and practical base of the current study, it was retained on the grammar/style where it loaded above .6. Both items were more closely scrutinized in the reliability analysis to make sure they were placed in the correct subscales.

Shell, *et al's.* (1989) writing scale is considered the standard for measuring writing self-efficacy and boasts high reliability for the task ( $\alpha = .92$ ) and grammar/style ( $\alpha = .93$ ) subscales. For this study, the modified writing self-efficacy scale maintains similar levels of reliability for the task subscale ( $\alpha = .916$ ) and for the grammar/style subscale ( $\alpha = .951$ ). For all participants, differentiation scores ranged from 11 to 121 ( $M = 86.18$ ;  $SD = 22.18$ ) on the task subscale and from 9 to 99 ( $M = 79.19$ ;  $SD = 17.22$ ) on the grammar/style subscale. The modified writing task subscale can be further divided into a common task subscale and a journalistic task scale, The common scale includes four indicators: Writing a resume, taking class notes, answering test

Table 4

## Factor Analysis of Writing Items

Item	Factor 1	Factor 2	Factor 3
Correctly punctuate a one-page passage	.856	.215	.178
Correctly use parts of speech (nouns, verbs, adj.)	.854	.202	.245
Write a simple sentence with proper punctuation and grammatical structure	.851	.120	.265
Correctly use plurals, verb tenses, prefixes, and suffixes	.862	.167	.275
Write compound and complex sentences with proper punctuation and grammatical structure	.840	.227	.255
Organize sentences into a paragraph as to clearly express a theme	.801	.233	.295
Write a paper with good overall organization (e.g., ideas in order, transitions, etc)	.734	.269	.317
Correctly spell all the words in a one-page passage	.736	.201	.150
Correctly use AP Style	.605	.442	.002
Compose an article for a popular magazine such <i>As Newsweek</i>	.170	.790	.299
Write a hard news story	.149	.858	.206
Break a news story on Twitter	.187	.578	.116
Write a feature story for a print or Web publication	.197	.889	.114

Table 4 Continued

Item	Factor 1	Factor 2	Factor 3
Write useful class notes	.337	.190	.633
Compose a one or two page essay to answer a	.272	.327	.670
Write a one or two sentence answer to a specific test question	.389	.174	.771
Prepare a resume describing your employment	.160	.219	.725

questions, and writing an essay. The journalistic sub scale includes seven indicators, including writing news stories, breaking news on Twitter, and other journalistic task related items. Both the common writing task subscale and the journalistic writing subscale have high reliabilities ( $\alpha = .807$  and  $\alpha = .924$ , respectively). For all participants, differentiation scores ranged from 4 to 44 ( $M = 34.87$ ;  $SD = 7.27$ ) on the common task subscale and from 7 to 77 ( $M = 51.31$ ;  $SD = 17.22$ ) on the journalistic task subscale.

**Measure of actual writing ability.** To determine the relationship between perceived writing ability and actual writing ability, Shell, *et al.* (1989) gave respondents 20 minutes to answer the question, “What do you believe to be the qualities of a successful teacher?” Given their study population of teacher prep students, the question was appropriate. In this research, students were asked to write an explanation of the importance of good writing. They were instructed to use Associated Press style, journalistic standards, and correct grammar and spelling. Given the focus on journalistic writing, asking students to display journalistic writing skills was appropriate.

Using a holistic scoring method, Shell, *et al.* (1989) had two researchers score writing samples in five areas on a scale from zero to three. Scoring categories focused on characteristics of quality essay writing and were based on definitions developed by Cooper (1985). The categories were realization, clarity/quality, organization, quantity/density, and language mechanics/usage (Shell, *et al.*, 1989). Realization evaluated the writing's vividness, alive quality, and demonstration of personal involvement and creativity on the part of the writer. Clarity/quality evaluated the writing on content, vocabulary, logical and distinct ideas, and sophistication. Organization evaluated the writing on the elaboration of the introduction and conclusion and cohesiveness. Quantity/density evaluated the number of distinct ideas present in the writing. Finally, language mechanics/usage evaluated the overall quality of the writing in relation to errors (Shell, *et al.*, 1989).

An adaptation of Shell, *et al.*'s, (1989) holistic writing score criteria was used in assessing actual journalistic writing ability. The Shell, *et al.*, (1989) criteria focuses on traditional essay writing style, while participants in this study were instructed to write in a journalistic style. The adapted holistic writing criteria (See Appendix C) includes the categories of: Language mechanics/usage; redefined category of clarity/quality; organization, quantity/density; and an additional category of adherence to media writing standards (i.e., Associated Press style). Clarity/quality in journalistic writing is evaluated on the ideas of clarity, modesty, and precision. Clarity is a lack of ambiguity in writing. Modesty demonstrates simple writing without showiness. Precision is using words for their exact meaning (Stovall, 2011). Organization in journalistic writing consists of writing in inverted pyramid style, which focuses on the most important fact first and facts then descend in order of importance, as well as writing short, often one sentence, paragraphs (Stovall, 2011). Quantity/density in journalistic writing is

different than that of traditional essay writing. In journalistic writing, a smaller number of words is desirable. Quantity/density is evaluated through efficiency, using the minimal number of words to make a point and expressing one idea per paragraph (Stovall, 2011). Finally, adherence to media writing standards consisted of evaluating the writing based on standards from the *Associated Press Stylebook* (2011). The category of clarity/quality was assigned a numeric score from one (1) to seven (7) while the rest of the categories were assigned a numeric score from one (1) to five (5), with the sum of the categories producing the holistic score (Shell, *et al.*, 1989). The addition of scoring options for each category provided more variance in assessing the writing samples.

To ensure reliability, two coders (a primary and secondary coder) with journalistic writing education and experience separately coded the writing samples using the revised holistic writing score criteria subscale (Cronbach's  $\alpha = .976$  indicates strong reliability between the two coders). Reliabilities for holistic writing scores are typically between .68 and .89 (Shell *et al.*, 1989; Shell *et al.*, 1995; White, 1985). The primary coder's results were used for analysis. For all participants, differentiation scores for the writing sample ranged from 5 to 27 ( $M = 16.78$ ;  $SD = 5.84$ ). The high reliabilities in this study are likely due to the specific writing style associated with journalistic writing, the specific rules associated with AP style writing, and the more specific coding options used in the modified holistic writing score criteria.

**Motivated strategies for learning questionnaire.** Scales from the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, *et al.*, 1991) were used to measure a variety of variables concerning students' motivations and strategies for success in their journalism classes (See Appendix D). Results from the MSLQ have provided empirical research in the areas of motivation and self-regulated learning. It has been used to address the nature of motivation and

its effect on learning strategies, refine the theoretical understanding of specific motivational constructs, and evaluate the motivational and cognitive effects of instructional interventions, including different course structures and various educational technologies (Duncan & McKeachie, 2005).

The Intrinsic Goal Orientation scale was used to measure students' internally driven reasons for wanting to succeed in journalism classes. Given the task-oriented nature of journalism and journalism education, the Task Value Scale was used to assess how students perceive the value of assignments in their classes in preparation for a career in journalism. In addition, the Time/Study Environmental Management Scale was used to measure students' abilities to manage and optimize their use of time and study environment. Finally, the Critical Thinking Scale was used to measure students' critical thinking perceptions. Given media industry leaders and educators' cries for students with a higher level of critical thinking, this scale evaluates a needed characteristic in the field of journalism.

Researchers have used the MSLQ hundreds of times and it is considered to be a reliable measure. Pintrich, *et al.*, (1993) ran a confirmatory factor analysis for both the motivation and strategies sections of the MSLQ. After the factor analyses, internal consistency was estimated using Cronbach's alpha, with 9 out of 15 scales measuring greater than .70. The scales used in this study all measured relatively high Cronbach's alphas. The Intrinsic Goal Orientation subscale ( $M = 5.03$ ;  $SD = 1.09$ ;  $\alpha = .74$ ) included four indicators, the Task Value subscale ( $M = 5.54$ ;  $SD = 1.25$ ;  $\alpha = .90$ ) included six indicators, the Time/Study Environmental Management subscale ( $M = 4.87$ ;  $SD = 1.05$ ;  $\alpha = .76$ ) included eight indicators, and the Critical Thinking subscale ( $M = 4.16$ ;  $SD = 1.28$ ;  $\alpha = .80$ ) included five indicators. Reliability of the measures remained high in this research,  $M = 18.70$ ;  $SD = 4.90$ ;  $\alpha = .811$  for the Intrinsic Goal Orientation

Scale,  $M = 31.02$ ;  $SD = 8.32$ ;  $a = .94$  for the Task Value Scale,  $M = 37.23$ ;  $SD = 8.55$ ;  $a = .777$  for the Time/Study Environmental Management Scale, and  $M = 21.24$ ;  $SD = 6.61$ ;  $a = .872$  for the Critical Thinking Scale. Reliability of all four categories assessed slightly higher in this study than in Pintrich, *et al's* (1993) initial study. For all participants, differentiation scores ranged from the lowest to the highest possible score for all subscales (see the correlation table in chapter 4 for a full breakdown).

In seeking to understand issues of efficacy, experience, motivation, and strategies for success in journalism students, the chosen scales and study population yielded valuable information. The adjusted Writing Self-Efficacy Scale provided an excellent measure of students' beliefs concerning their journalistic writing ability. The subscales of the MSLQ provided understanding into students' motivation and strategies for success in class. The writing samples showed students' actual ability to write journalistically and to utilize proper grammar. Answers to these scales and students' answers concerning their past journalism experience provide a deeper understanding of issues related to journalism education and the steps many students take in achieving success in a journalism program.

## Results and Discussion

The purpose of this undertaking was to address a variety of hypotheses and research questions exploring variables (See table 5) that contribute to students' journalistic self-efficacy and writing ability. In this model, variables were divided into categories of background, learning strategies, and journalistic experiences. By examining the aforementioned variables we develop an understanding of factors that play into both journalistic writing self-efficacy and actual journalistic ability.

### **The use of learning strategies in intrinsically motivated journalism majors**

*RQ1: To what extent do background (sex, reason for taking the class, anticipated career field, and intrinsic motivation) predict skills (task value, critical thinking, and time/environmental management)?*

Question one asks to what extent background variables such as sex, reason for taking the class, anticipated career field, and intrinsic motivation predict class-specific learning strategies, such as task value, critical thinking, and time/environmental management. In examining the relationship between background and learning strategies, a linear regression shows a statistically significant model ( $F_{4, 445} = 125.071; p = .000; R^2 = .525$ ) where reason for taking the class ( $t = -4.142; p = .000$ ) and intrinsic motivation ( $t = 20.314; p = .000$ ) predict task value (See Table 6).

**Intrinsically motivated journalism majors place high value on class tasks.** Students who are taking a class because it is in their major and students with higher intrinsic motivation place more value on classroom tasks. These results help clarify the value students find in performing learning tasks in required classes from a career preparation perspective and a personal growth perspective. In both cases, students are attempting to reach a

Table 5

## Correlations Between Measures

Measure	<i>Means</i>	Standard deviation	Intrinsic motivation	Critical thinking	Task value	Time mangmnt.	Grammar self-efficacy	Journalism self-efficacy	Writing ability
Intrinsic motivation	<i>M</i> = 18.70	<i>SD</i> = 4.90		.579**	.712**	.459**	.253**	.385**	-.072
Critical thinking	<i>M</i> = 21.24	<i>SD</i> = 6.61			.518**	.389**	.079	.323**	-.092
Task value	<i>M</i> = 31.02	<i>SD</i> = 8.32				.497**	.198**	.310	-.129**
Time mgt.	<i>M</i> = 37.23	<i>SD</i> = 8.55					-.222**	.271**	-.059
Grammar Self-efficacy	<i>M</i> = 79.19	<i>SD</i> = 17.22						-.546**	.049
Journalism self-efficacy	<i>M</i> = 51.31	<i>SD</i> = 17.22							-.005
Writing ability	<i>M</i> = 16.78	<i>SD</i> = 5.84							

\* $p < .05$ , \*\* $p < .01$

Table 6  
Linear Regression for Task Value

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	9.982	1.643		6.075	.000
Sex	.694	.575	.040	1.208	.228
Reason for class	-1.486	.359	-.140	-4.142	.000
Anticipated field	.059	.117	.017	.506	.613
Intrinsic motivation	1.164	.057	.681	20.314	.000

Dependent Variable: Task value

goal, either personal growth or a career (which often overlap), and see the classroom experiences as valuable in attaining that goal.

Intrinsically motivated students often engage in tasks for no other reason than the sake of learning (Eccles & Wigfield, 2002; Pintrich & Schunk, 1995) and find more enjoyment and higher achievement in participating in tasks (Gottfried, 1985). Intrinsically motivated journalism students value their classroom experience because they feel it provides personal benefit towards their goals. For example, students who want to be reporters for the *New York Times* would see value in learning the proper structure, rules, and style of writing associated with journalistic writing, not because they look forward to accolades from outside sources, but rather because the mastery of journalistic writing provides them a personal sense of accomplishment and confidence in their ability to write. Intrinsically motivated students engage in journalistic work because they enjoy the process and want to master the skills.

Intrinsically motivated students often feel a sense of competence and self-determination (Bandura, 1993; Seifert, 1997; Seifert & O’Keefe, 2001). Given that intrinsically motivated students feel a sense of competency, students who value journalistic tasks are likely comfortable engaging in journalistic work and are likely pursuing their goals because they believe in the value of the journalistic process. Intrinsically motivated students prefer a self-determined path. These students are seeking skills that will allow them to engage in a journalistic career of their choosing, where they play a role in the decisions that impact their career. Intrinsically motivated students would likely excel in media ventures where legacy rules (e.g. “It has always been done that way”) are not imposed on the decision making process.

This intrinsic focus is juxtaposed with students’ motivation to engage in tasks with the motivation of preparing for a career. Motivation is goal-directed behavior driven by beliefs about possible outcomes of action (Bandura, 1986, 1989, 1997), in this case, a job. Intrinsically motivated students in a journalism program have likely set the goal of being proficient at journalistic tasks by the end of their study and have adjusted their behavior to meet their goal for internal reasons. However, motivation in preparation for a journalism career is less internally motivated and more motivated by the need to be able to demonstrate the ability to carry out journalistic tasks that will lead to a job, and then continuing those tasks with excellence. That is not to say that students preparing for a career in journalism do not have intrinsic motivation. In fact, students who are intrinsically motivated and who are preparing for a career in journalism are likely to excel faster, enjoy their work more, and value both their classroom and work experiences. Pintrich & Schunk (1995) note that motivation is a process rather than product and goals are reached through personal choices, engagement in tasks, and exerting effort. Whether students are driven to be successful at journalistic writing tasks for intrinsic reasons, for career

reasons, or both, they are making choices, engaging in tasks, and exerting effort in ways that will help them reach their goals.

**Intrinsically motivated journalism majors think critically.** In addition to predicting task value, reasons for taking a journalism course and intrinsic motivation also predict higher critical thinking skills. Linear regression shows a statistically significant model ( $F_{4, 445} = 63.302$ ;  $p = .000$ ;  $R^2 = .357$ ) where the reason for class taking a class ( $t = -3.540$ ;  $p = .000$ ) and intrinsic motivation ( $t = 14.211$ ;  $p = .000$ ) are statistically significant predictors of critical thinking (See table 7).

Students who are taking a journalism class because it is in their major (journalism majors) and who are intrinsically motivated indicated higher critical thinking skills. Intrinsic motivation and critical thinking are evident in previous journalism-focused research. Many journalism majors select journalism as a career, in part, due to its value to society (Bowers, 1974; Endres & Wearden, 1990). These students envision journalism as an altruistic profession where journalists seek truth and provide their readers with information of value and importance, despite what critics or detractors might say. Harter & Connell (1984) call this an internal criterion (intrinsic motivation) for judging the value of an activity. Therefore, intrinsically motivated journalists approach stories from the perspective of providing valuable information to their readers. They evaluate the criteria of their work based on their own beliefs, rather than those of their audience. Most journalism students saw the field of journalism as lacking prestige or accolades (extrinsic motivators) so they engaged in journalistic tasks because they believed journalism to be of value (Kimball & Lubell, 1960; Lubell, 1959). Journalism students who are intrinsically motivated are likely well suited to the field of journalism because they are motivated by personal beliefs (intrinsic motivation) to provide readers information of value and will not

Table 7  
 Linear regression for Critical Thinking

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	11.688	1.514		7.719	.000
Sex	-1.383	.530	-.099	-2.612	.090
Reason for class	-1.171	.331	-.139	-3.540	.000
Field	-.096	.108	-.034	-.895	.371
Intrinsic motivation	.750	.053	.554	14.211	.000

Dependent Variable: Critical thinking

likely be dissuaded by criticism or opposition. Establishing an internal criterion of value requires cognitive engagement in decision-making (i.e., critical thinking) (Young, 1980).

Critical thinking is associated with evaluating gained knowledge and improving that knowledge (Paul & Elder, 2008). When evaluating information they received in class, journalism majors who were analytically bent questioned things they heard or read, sought supporting evidence, developed ideas about material beyond what was presented, and sought possible alternative explanations. They demonstrated critical thinking skills, which are highly sought in journalism professionals (Carnegie, 2005). These analytic journalism majors exemplify students who think critically being disposed to evaluating knowledge, thinking for themselves, and logically articulating ideas (Yinger, 1980). These skills are not only valuable to journalism students, but also to professional journalists. On a daily basis, reporters work through complicated data, which makes up the news story they are writing, seek information, dig for

facts, evaluate what they hear, and endeavor to share truth with their readers. They often hit roadblocks and, based on previous experience, change course to reach their goals.

These findings, and previous research, suggest journalism attracts students who enjoy evaluating information, thinking for themselves, and who are driven by a desire to provide a service to society rather than gaining personal accolades—characteristics that could be considered desirable in journalism majors.

**Intrinsically motivated and time/study environment management.** Further analysis provides understanding into the relationship between intrinsic motivation and time/environment management. The linear regression for question one, to what extent do background variables predict learning strategies, also reveals a statistically significant model ( $F_{4, 445} = 29.933$ ;  $p = .000$ ;  $R^2 = .212$ ) where intrinsic motivation ( $t = 10.327$ ;  $p = .000$ ) is a statistically significant predictor of time/environment management (See Table 8).

Students who have higher intrinsic motivation utilize more time/environmental management strategies. Students who are intrinsically motivated often employ independent judgments and mastery of internal criteria for reaching and gauging success (Harter & Connell, 1984). While studying for their journalism courses, students determined that success could be reached by setting aside space and time for study, scheduling study activities, engaging in readings and course material, attending class, reviewing notes, and prioritizing the class. Engaging in these learning strategies demonstrates an ability to self-regulate learning activities, a trait of intrinsically motivated students (Pintrich, 1999), and pursuit of mastering a task in a self-determinant fashion (Bandura, 1997; Seifert, 1997; Seifert & O'Keefe, 2001). Students who choose to engage in academic material are more successful at academic endeavors (Seifert, 2004). Self-determinant behavior in academics is both setting one's own

Table 8  
Linear Regression for Time/Study Management

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	22.057	2.150		10.259	.000
Sex	.823	.752	.046	1.094	.274
Reason for class	-.095	.470	-.009	-.203	.839
Field	-.105	.153	-.029	-.688	.492
Intrinsic motivation	.774	.075	.448	10.327	.000

Dependent Variable: Time/study management

goals and choosing strategies that will aid in success. Logically, students who are more attentive to study needs, who excel in academics, and who employ self-determinant strategies for learning are likely to optimize their study time and environment.

The ability to manage time and environmental factors is another desirable characteristic in journalism professionals. Students indicated an understanding of the necessity to invest time and environmental factors into their pursuit of journalistic endeavors. Given the ASNE's (2011) findings that maintaining quality writing and editing in the face of rapid deadlines and shrinking staffs is key to the future of journalism, the ability to manage time and environment while producing quality work will be of value to students entering the journalism profession. Not only do background variables provide understanding of how students utilize learning strategies, but also they provide insight into journalistic experience.

## **The role of experience in journalistic career preparation**

*RQ2: To what extent do background (sex, reason for taking the class, anticipated career field, and intrinsic motivation) predict experiences (journalistic experience and current class)?*

Question two asked to what extent do background variables predict journalistic and class experiences. Background variables predicted a much smaller percentage of variance in experience variables than they did in predicting learning strategies. A linear regression shows a statistically significant model ( $F_{4, 445} = 14.506; p = .000; R^2 = .107$ ) where people who are taking a journalism class because it is in their major ( $t = -3.166; p = .002$ ), students who anticipated a career in a journalism-specific field ( $t = -3.454; p = .001$ ), and students with higher intrinsic motivation ( $t = 3.988; p = .000$ ) predict journalistic experience (See Table 9).

**Intrinsically motivated journalism majors have more experience.** Students majoring in journalism, preparing for a career in journalism, and students who are intrinsically motivated have more journalistic experience. Given that the number of classes taken in the journalism major is one indicator of experience, it is logical that journalism majors and students focused on a journalistic-centric career have more journalistic experience. Students take successive courses and gain experience as they prepare for a career in journalism. Journalism students also often participate in media-related activities on campus. For example, students in the second course of the journalism program progression are expected to participate in one of the campus media outlets, thereby increasing their experience. Often students continue working for the college media outlet beyond their required time. This could suggest intrinsic motivation.

When approaching journalistic coursework, journalism majors sought a deeper level of understanding from their learning experiences and strived to achieve more through their studies, a common trait of intrinsically motivated students (Pintrich & De Groot, 1990). Students desired

Table 9  
Linear Regression for Experience

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.510	.237		2.153	.032
Sex	.151	.083	.082	1.822	.069
Reason for class	-.164	.052	-.147	-3.166	.002
Field	-.058	.017	-.157	-3.454	.001
Intrinsic motivation	.033	.008	.183	3.988	.000

Dependent Variable: Experience

challenging course material that taught them new things and aroused their curiosity. In preparing for a career in journalism, these students were truly seeking to learn and master the material. They found satisfaction in trying to understand the content, not just to pass the class, but in preparation for their career.

As noted in the discussion of question one, intrinsically motivated students often focus on participating in a task for the sake of learning. While these students' experiences are often undertaken in an effort to advance towards graduation and in preparation for a career, it is logical that they also enjoy their media experiences and therefore were involved in extra-curricular media activities or earlier high-school media experiences. However, students not training for a career in journalism were less likely to have had media experience.

Table 10  
Linear regression for Class

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.740	.295		9.294	.000
Sex	-.128	.103	-.056	-1.242	.215
Reason for class	-.368	.064	-.266	-5.723	.000
Field	-.042	.021	-.091	-1.997	.046
Intrinsic motivation	.019	.010	.087	1.894	.059

Dependent Variable: Class

**Experience decreases from major to minor and minor to elective.** In a further analysis of question two, do background variables predict experiences, linear regression shows a statistically significant model ( $F_{4, 445} = 13.443; p = .000; R^2 = .100$ ) where taking a journalism class as an elective ( $t = -5.723; p = .000$ ) and anticipating a career in a non-journalistic field ( $t = -1.997; p = .046$ ) are negatively related to journalistic experience (See Table 10). Students who are taking a journalism class as an elective, or who anticipate a non-journalistic career, are enrolled in the lower-level, introductory classes and have less journalistic experience. Logically, students who are taking journalism courses because they have an interest in journalism, but journalism is not their career path or major, are likely enrolled in the lower-level courses for a variety of reasons. Students may have enrolled in journalism courses to explore journalism as a major and career, but changed their mind after the initial class or found themselves struggling in subsequent classes (Bissell & Collins, 2001). Efficacy often influences the course of action chosen, the amount of effort, time, and perseverance dedicated to an activity, and the level of accomplishments a

student realized (Bandura, 1997). Facing a low sense of self-efficacy in an area of study, students often will choose a different path in which they might experience a higher sense of self-efficacy.

These findings suggest students who are involved in journalistic activities find satisfaction and enjoy the challenge of journalistic work. As students move down the scale, where journalism is a minor, or they anticipate a non-journalistic career, the value and satisfaction of journalism experiences dwindle. This would suggest non-journalism majors, or students not preparing for a career in journalism, are less intrinsically motivated towards journalistic tasks and see less value in journalism as a career. Given that intrinsically motivated students indicated more journalistic experience, understanding the diversity of those experiences can further explain the relationship between intrinsic goal orientation and media experiences.

### **Intrinsic motivation points to journalistic-specific experience**

*H1: Students with higher internal motivation have more high-school yearbook, high-school newspaper, and college media experience.*

Students with higher internal motivation do not have more high-school yearbook experience, but do have more high-school newspaper and college media experience. A statistically significant relationship between intrinsic motivation and high-school newspaper experience ( $t_{(448)} = -3.985$ ,  $m = 20.45$ ,  $p = .000$ ), as well as between intrinsic motivation and college media experience, ( $t_{(448)} = -5.010$ ,  $m = 20.08$ ,  $p = .000$ ) were found. Students who are more intrinsically motivated were more likely to work on the high-school newspaper and a form of college media.

As discussed earlier, intrinsically motivated students often engage in tasks for the sake of learning or for the value the task provides. Intrinsic motivation is fulfilled through satisfactory completion of a task rather than outside praise (Eccles & Wigfield, 2002; Pintrich & Schunk,

1995). While high-school newspaper experiences provide budding journalists the opportunity to serve their high-school community, thereby feeding intrinsic drives, working on the high-school yearbook likely satisfies other motivations. Working on a yearbook is less about providing information, analyzing facts, and thinking through the writing process and more about designing visual elements, pages, and graphics. While these tasks are related to media production, they are less journalistic writing-centric tasks. Yearbooks serve to chronicle students, their activities, and their experiences throughout their high-school education. Both creating and being pictured in such a display would likely satisfy extrinsic, rather than intrinsic, motivation. When comparing high-school newspaper experience to high-school yearbook experience, it is logical that yearbook experience was not related to intrinsic motivation. While both tasks feed creative appetites and provide students opportunities to master experiences, the yearbook tasks do not fulfill the intrinsic desires of students who find fulfillment in more journalistic-centric writing tasks and who would likely excel as journalists. However, high-school newspaper and college media experiences do provide satisfying experiences for students with an intrinsically motivated journalistic propensity.

Because intrinsically motivated students find tasks enjoyable (Gottfried, 1985) and because they like to master experiences for the gained knowledge (Bandura, 1997; Seifert, 1997; Seifert & O'Keefe, 2001), journalism majors are more willing to devote time and energy to additional journalistic tasks. Many high-school newspapers and college media experiences require a commitment of extra-curricular time with no monetary or grade reward. For example, many of the students surveyed participate in the university newspaper or the university's online publication and receive no compensation. Such actions suggest intrinsically motivated behavior on the part of students. Drawing on findings that journalism majors view journalistic tasks as a

service to society (Bowersm 1974; Endres & Wearden, 1990), these intrinsically motivated students have deemed the time and monetary sacrifice of additional high-school and college media experiences as worth undertaking. Students with such a dedication to providing content to their high-school or college community display characteristics that will benefit them as they transition into professional journalism. Just as intrinsic motivation drives some students to participate in high-school and college media experiences, students who are majoring in journalism also have a variety of journalistic experiences.

### **Journalism majors and past experience**

*H2: Students who are taking the course because it is required for their major have more high-school yearbook, high-school newspaper, and college media experience.*

Hypothesis two, students who are taking the journalism course because it is required for their major have more high-school yearbook, high-school newspaper, and college media experience was partially supported, with high-school newspaper and college media experience being significant. An ANOVA shows a statistically significant relationship between reason for taking the course and working on a high-school newspaper ( $F_{2, 447} = 5.003; p = .007, \eta^2 = .0219$ ). Students who were taking the journalism class because it was in their major were more likely to have worked on a high-school newspaper than those who were taking the journalism class as an elective. These findings, consistent with previous research (Cranford, 1960; Weigle, 1957), suggest that many journalism majors first became involved with journalistic tasks in high school and likely choose their major before leaving high school.

These findings cast a light on the importance of high-school media experience. Students pursuing a career in journalism often begin their journalistic experiences at the high-school level, which places an onus on high-school journalism teachers to provide more focused, professional

journalistic experiences so that students can begin developing their skills at an early age. To provide students a clear understanding of the demands of a career in journalism and to prepare students to undertake the task required in the field of journalism, high-school journalism education should focus on the fundamentals of journalistic writing, analytic thinking, and development of deep knowledge in areas of social importance (Carnegie, 2005). High-school journalism also needs to break from the traditional model of weekly or monthly print publications and expand into online venues. Given the technological focus of current media endeavors, rapid journalistic deadlines, and the multiple skill-sets demanded by today's media environment (Carnegie-Knight Initiative, 2011), students benefit from early and repeated journalism skill-development experiences. The earlier students can begin to master skills and techniques associated with today's journalistic environment, the more prepared they will be to enter a college journalism curriculum and the field of journalism.

Hypothesis two, students who are taking the journalism course because it is required for their major have more college media experience was also statistically significant. A statistically significant relationship between reasons for taking a journalism class and working in an area of college media exists ( $F_{2, 447} = 19.868; p = .000, \eta^2 = .0816$ ). Those students who were taking the journalism class because it was in their major were more likely to work in a form of college media than those who were taking the journalism class as an elective ( $M_{major} = .4644, M_{Elective} = .1084$ ). Those taking the journalism class because it was in their minor were more likely to work in an area of college media than those who were taking the journalism class as an elective ( $M_{minor} = .5000, M_{Elective} = .1084$ ). This suggests that the more focused students are on a journalism curriculum, the more likely they are to participate in a related media activity.

A social cognitive perspective (i.e., belief in and development of ability, expectation outcome, and goal mechanisms), including the formation and elaboration of career-relevant activities, persistence in education, and pursuit of a career (Lent, *et al.*, 1994), support the idea that students majoring or minoring in journalism might engage in higher levels of media-related experience. This higher level of involvement would likely be in an effort to hone skills, increase the likelihood of success in their endeavors, for the enjoyment of the task, and ultimately to be successful and competitive in the field of journalism. These higher levels of involvement in journalistic experiences are seen in journalism majors, more than minors, given their specific focus on the fundamental skills necessary to be successful in the field of journalism. Journalism minors also have an interest in developing journalistic skills; however, their focus is on another major, which they then supplement with their journalism minor. For example, economics majors with a minor in journalism might want to learn the journalistic craft so they can report on economic issues, but they have determined that a major in economics is more beneficial to reaching their goals. Students pursuing journalism minors, but majoring in another topic, may provide an answer to industry leaders who seek journalists with expertise in specific areas.

However, the lack of real-world journalistic experience that journalism minors have participated in gives a weaker experience base and mastery of the journalistic craft intricacies. Given their divided focus, these students have had less of an opportunity to develop skills and participate in experiences that will aid them in developing journalistic skills. Journalism minors may lack repeated success in an area, which is necessary to efficacy development, as well as to actual ability to successfully complete a task (Bandura, 1986, 1989, 1997). For example, students participating in journalistic experiences focused on writing have more opportunities to turn in work, have it evaluated, and learn from their mistakes. Upon each undertaking of grammar and

journalistic writing, students learn more and gain self-confidence in their ability. Students engaged in journalistic classroom experiences also have opportunities to engage in learning strategies, which also impact efficacy beliefs.

### **Impact of learning strategies on grammar self-efficacy**

*RQ3: To what extent do classroom strategies (task value, critical thinking skills, and time/environmental management) predict grammar self-efficacy?*

Linear regression for question three, to what extent do learning strategies, such as task value, critical thinking skills, and time/environmental management, predict grammar self-efficacy, revealed a statistically significant model ( $F_{3, 454} = 10.749; p = .000; R^2 = .060$ ) where task value ( $t = 2.412; p = .016$ ) and time/environmental management study strategies ( $t = 3.582; p = .000$ ) predict high writing self-efficacy in grammar tasks (See Table 11).

Students who have higher task value for the material in their journalism course and students who manage their time and environmental surroundings while studying for their journalism classes hold stronger views of their ability to perform grammar tasks. These findings are supported by Bandura's (1997, 2001) idea of self-efficacy as a mechanism of agency. Students who hold high self-efficacy for grammar have put effort into managing their time and environment while studying, and they have found the tasks in their journalism classes to be beneficial in mastering grammatical skills. Students have engaged in tasks that have developed their proofreading skills and their abilities to develop correct sentence structure, paragraph structure, and writing density. Self-efficacy as a mechanism of personal agency plays a key role in personal self-development, adaptation, and renewal of skills, and is demonstrated as individuals take steps to reach a level of task mastery where the task no longer requires a great deal of thought (Bandura, 1997, 2001). Students taking steps to master writing skills (i.e.,

Table 11

## Linear Regression for Learning Strategies and Grammar Self-Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	60.163	3.787		15.888	.000
Task value	.281	.117	.138	2.412	.016
Critical thinking	-.171	.138	-.066	-1.234	.218
Time/study management	.377	.105	.190	3.582	.000

Dependent Variable: Grammar self-efficacy

participating in class tasks and managing their time and environmental resources) reach a higher level of grammar efficacy. They have dedicated the resources necessary to raise their belief in their ability to produce grammatically correct writing. Students taking journalism classes, and who find value in the course material, have engaged in learning strategies to the point that grammar skills are second nature. These students hold self-efficacy beliefs towards grammar based on the resources they have invested in preparing to undertake such tasks. For example, students who set aside five hours a week to focus on improving their writing ability logically should have higher grammar efficacy beliefs than students who put no effort into developing their grammar skills.

Students who hold high self-efficacy beliefs towards a task often can anticipate problems and adjust their behavior and strategies for overcoming barriers to goals (Bandura, 2001).

Students who value their journalistic course tasks have likely used in-class tasks as a way to overcome obstacles and gain skills in grammar usage. For example, students who struggled with comma placement likely took advantage of class assignments, feedback, presentations, and skill-

building activities to learn more about comma placement, thereby overcoming an obstacle to their ability to use proper grammar. Not only did task value and time/environment management predict self-efficacy in grammar skills, but also self-efficacy in journalistic writing. This suggests that students would walk through similar obstacle-overcoming behavior in pursuing better journalistic writing ability.

### **Learning strategies' impact on journalistic writing-self-efficacy**

*RQ4: To what extent do skills (task value, critical thinking skills, and time/environmental management) predict journalistic self-efficacy?*

A linear regression for question four, to what extent do learning strategies (task value, critical thinking skills, and time/environmental management) predict journalistic self-efficacy, reveals a statistically significant model ( $F_{3, 454} = 25.164; p = .000; R^2 = .137$ ) where task value ( $t = 2.674; p = .008$ ), time/environmental management ( $t = 2.368; p = .018$ ), and critical thinking skills ( $t = 3.872; p = .000$ ) predict journalistic writing self-efficacy (See Table 12). Students who view tasks in their journalism class as valuable, manage their time/environmental resources in studying, and have higher critical thinking skills also have higher journalistic self-efficacy beliefs. As noted, students who strive to master academic skills employ strategies and engage in tasks they feel will lead them to success.

Findings suggest that students felt the tasks in their journalism classes provided them experiences that lead to success in journalistic writing tasks. As students engaged in journalistic writing tasks, they likely encountered success and encouragement, witnessed the success of others, and experienced a reduction in cognitive barriers to success, all sources of strengthened efficacy beliefs (Bandura, 1997). Given that self-efficacy plays a part in determining how much value a student places on a task or course (Bandura, 1986), experiences that increased students'

Table 12

Linear Regression for Strategies and Journalistic Writing Self-Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	22.097	3.667		6.027	.000
Task value	.302	.113	.147	2.674	.008
Critical thinking	.519	.134	.200	3.872	.000
Time/study management	.242	.102	.120	2.368	.018

Dependent Variable: Journalism writing self-efficacy

beliefs in their journalistic ability should be of value to the students. Students whose self-efficacy toward journalistic tasks grew during their course work are likely to value the experience because of the benefits the students observed toward their skill development. They are also likely to be more adept at overcoming obstacles that might hinder them from developing journalistic skills. Similar to the example of students struggling with comma usage, students struggling with writing a journalistic lead could use their classroom experiences to hone their skills and increase their efficacy beliefs toward journalistic tasks.

Like task value, managing time/environment resources increases efficacy toward journalistic tasks. Learning tasks in journalism classes serve as mastery experience opportunities (Bandura, 1997), where students can employ learning strategies (e.g., time/environment management) and experience success, thereby building efficacy beliefs towards their journalistic skills. The higher students' efficacy beliefs toward their ability to produce journalistic writing, the more time and resources they are likely to dedicate to mastering journalistic writing

(Bandura, 1997, 2001). As was the case with grammar self-efficacy, students who set aside time and space in pursuit of mastering journalistic skills developed higher confidence in their ability to write. These findings suggest students find value in engaging in journalistic writing tasks and in being organized and managing their time and environment. As students prepare for a career in journalism, skills focused on resource management and strengthening writing ability will serve them well.

Finally, the linear regression for question four revealed that students who thought critically held higher journalistic writing self-efficacy. When applying critical thinking skills to journalistic course work, students questioned material, sought verification, developed their own ideas, and inquired about alternative explanations, all desirable journalistic skills. As students developed their journalistic writing skills, they critically analyzed the material they were presented. Self-efficacy is often derived from students' search for a deeper understanding of a specific topic (Pajares *et al.*, 1999). In addition to students seeking understanding and developing skills through their courses, the courses in the journalism program also offered more contextual knowledge, which could strengthen analytic thinking. According to course descriptions, students were exposed to knowledge and understanding beyond writing skills; they were also asked to consider the role of journalism from historic, ethical, legal, and practical standpoints. Students who think critically were given an opportunity to develop their skills, which make up the foundation of the journalistic craft, as well as the opportunity to analytically apply their knowledge base to each story, situation, and experience related to the field. Logically, students who think critically should be drawn to such tasks given that they are asked to utilize their critical thinking skills to produce class work.

Journalism students who manage their time/environmental resources and who can think critically will likely be successful in professional journalistic pursuits, including their coursework (Pithers & Soden, 2000; Yinger, 1980). As students progress towards graduation from a journalism program, learning strategies build both grammar and journalistic writing efficacy. This research has shown that course work is not the only variable that shapes future journalists. Journalistic experiences also predict efficacy in grammar and journalistic writing tasks.

### **Journalistic experience in the development of grammar self-efficacy**

*RQ5: To what extent do experiences (high-school newspaper, high-school yearbook, college media, and class) predict grammar self-efficacy?*

Linear regression for question five, to what extent do experiences (i.e. high-school newspaper, high-school yearbook, college media, and class) predict grammar self-efficacy, shows a statistically significant model ( $F_{4, 445} = 10.075; p = .000; R^2 = .075$ ) where high-school newspaper experience ( $t = 3.678; p = .000$ ) and journalism classes ( $t = 2.671; p = .008$ ) predict grammar self-efficacy (See Table 12). Students with high-school newspaper experience and students who have completed more journalism classes have higher grammar self-efficacy. These findings once again highlight the relationship between experiences and perceived proficiency.

Both high-school newspaper experience and journalistic classroom experience are prime areas for sources of efficacy to be fed because students' successes and failures facilitate the development of their grammar self-efficacy (Bandura, 1997; Pajares, 2003). Students who engaged in journalistic experiences increased their grammar skills confidence. They likely profited from teacher feedback in the classroom and adviser feedback in high school.

Table 13

## Linear Regression for Experience and Grammar Self-Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	71.692	1.771		40.474	.000
High-school newspaper	7.251	1.971	.174	3.678	.000
High-school yearbook	.836	1.843	.021	.454	.650
College media	2.825	1.909	.082	1.480	.140
Class	2.274	.851	.146	2.671	.008

Dependent Variable: Grammar self-efficacy

Students with high-school newspaper experience likely benefit from a sponsor's or a teacher's feedback, evaluation, and editorial suggestions while working on the student publication because students develop higher self-efficacy when primary sources of efficacy are nurtured (Garcia & Fidalgo, 2008). Given budget constraints facing most high schools, it is also likely that a newspaper adviser would have a background in English, or more traditional writing, rather than journalistic writing. Often, teachers who have primary teaching responsibilities in a different area advise school newspapers. This would likely lead to more of a focus on detailed grammar correction and development, which would build efficacy in that area. Students who demonstrate strong writing and editing ability often serve as editors on high-school newspapers where they edit and evaluate their classmates' stories. However, a high-school student who excels in grammar does not necessarily have a background in journalistic writing. While these student editors' evaluations could serve as a source of strengthened grammar efficacy, they may not serve to strengthen journalistic writing efficacy. Given the domain-specific nature of writing

efficacy (Pajares *et al.*, 1999), it is understandable why students would develop grammar-specific efficacy from a high-school newspaper experience. Students with high-school newspaper experience would have had more opportunities to develop grammar efficacy.

Feedback from an adviser or teacher on a high-school publication could be similar to the feedback that would be expected in a college journalism class focusing on developing writing skills. Students should be provided with verbal and social persuasion (i.e., positive oral feedback) (Bandura, 1986), which encourages efficacy development. In addition, students would likely be exposed to vicarious success—where their efficacy increased as they saw the success of their classmates and friends—which is considered a strong source of self-efficacy development (Bandura, 1986). Students who held a strong sense of grammar efficacy in their journalism courses likely took advantage of feedback from their teachers and strived to overcome obstacles to their success. As they learned from both their successes and mistakes, efficacy beliefs increased. Students who experienced success, validation, and encouragement in their high-school newspaper experience and classroom experience would logically develop a stronger sense of grammar self-efficacy.

It is not surprising that high-school yearbook experience is not a significant predictor of grammar self-efficacy, given that working on a yearbook involves minimal expository writing where grammar skills are necessary. On the surface, it is a little surprising that college media experience does not significantly contribute to the development of grammar efficacy. However, college media include a variety of experiences that are not grammar-centric, such as radio, television, and photography. While these are media-related skills, they do not necessarily contribute to the mastery of grammar skills. When developing self-efficacy, tasks must be specific to the developing efficacy belief (Bandura, 1997; Pajares, 2003). While these activities

do serve as mastery experiences in the development of journalistic writing self-efficacy (see the discussion of research question six), they are not specific enough to impact grammar skills. The importance of the relationship between journalistic coursework and grammar efficacy can be seen by the increase in grammar efficacy that occurs in students in each subsequent journalism course.

### **The importance of journalistic coursework in grammar efficacy development**

*H3: Students who have taken more journalism courses have higher grammar self-efficacy.*

Hypothesis three, students who have taken more journalism courses have higher grammar self-efficacy, was supported and provides a more detailed picture of the development of students' perceived skills as they move through the journalism curriculum. A statistically significant relationship between the number of courses taken and grammar self-efficacy ( $F_{3, 458} = 7.154; p = .000, \eta^2 = .0448$ ) reveals that students who were taking later journalism classes had higher grammar self-efficacy than those taking lower-level classes. Statistically significant differences between cohort 1 (introduction to mass communication) and cohort 2 (introduction to journalism and electronic media) ( $M_{mass} = 74.80, M_{jem} = 81.08$ ); cohort 1 and cohort 3 (news writing) ( $M_{mass} = 74.80, M_{news} = 82.27$ ); and cohort 1 and cohort 4 (reporting) ( $M_{mass} = 74.80, M_{reporting} = 83.31$ ) suggest that students' efficacy for grammar tasks increase as they progress through the journalism curriculum. Students in the first class, introduction to mass communication, do not receive regular evaluation or editing on writing samples. The class focuses more on contextual and introductory issues, rather than skill-building exercises. Therefore, it is logical that students in the first class would have the lowest grammar efficacy.

It is not until the second class, introduction to journalism and electronic media, that students begin writing journalistic stories on a regular bases. As part of their course work in the

second class, students work for one of the university's media outlets. This provides their first regular opportunity to receive feedback on their journalistic stories, and to start developing better grammar skills. In the third class, news writing, students are involved in weekly writing assignments, where instructors explain and critique grammar use. The fourth class, reporting, is where students continue to master writing practice and grammar skills. As the students have more exposure to evaluation of writing and more opportunities to practice grammar skills, their belief in their ability to be able to produce grammatically correct work increases. Given that each class builds on skills taught in the previous class and students have a variety of opportunities to strengthen their skills, efficacy beliefs should increase as they progress through the major.

These findings highlight the importance of practice and repetition in learning grammar skills. Through the four courses, grammar efficacy continues to increase. Clearly, perceived skill development does not level out in grammar efficacy development, suggesting that continued practice in grammar tasks is necessary for students seeking strong writing skills, or a career in journalism. Both classroom experience and journalistic experience can offer opportunities to further develop grammar efficacy and journalistic writing efficacy.

### **Journalistic experience as a predictor of journalistic self-efficacy**

*RQ6: To what extent do experiences (high-school newspaper, high-school yearbook, college media, and class) predict journalism self-efficacy?*

Linear regression for research question six, to what extent do experiences such as high-school newspaper and yearbook, college media, and journalism classes predict journalism self-efficacy, revealed a statistically significant model ( $F_{4, 445} = 25.691; p = .000; R^2 = .180$ ) where high-school newspaper experience ( $t = 3.952; p = .000$ ), college media experience ( $t = 3.310; p = .001$ ) and class ( $t = 4.465; p = .000$ ) predict journalistic writing self-efficacy (See Table 14).

Table 14

## Linear Regression for Experience and Journalistic Writing Self-Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	39.133	1.682		23.268	.000
High-school newspaper	7.398	1.872	.176	3.952	.000
High-school yearbook	2.679	1.750	.067	1.531	.126
College media	5.999	1.812	.172	3.310	.001
Class	3.609	.808	.229	4.465	.000

a Dependent Variable: Journalism writing self-efficacy

Students with more high-school newspaper experience, college media experience, and journalism class experience have higher journalistic self-efficacy. Given the close relationship of grammar and journalistic writing tasks (i.e., journalistic writing requires good grammar usage), it is logical that high-school newspaper experience and journalism class experience predict both grammar and journalistic writing self-efficacy. As students participate in media endeavors, their experiences give them added confidence in their abilities to conduct grammar and journalistic writing tasks.

The predictive power of college media experience towards journalistic writing efficacy, but not grammar efficacy, is somewhat perplexing. On the surface, it would be logical for college media experience to predict both. However, when writing is required in college media outlets, the emphasis is on professional journalistic writing skills rather than grammatical writing skills, which should have been learned at an earlier age. Likely, college students who have college

media experience receive feedback, and other forms of efficacy support focused on journalistic writing rather than grammatical writing.

Students may have also blurred the lines between improved grammar skills and journalistic writing since the two have significant overlap. For example, students who received praise for their ability to use proper punctuation in a news story may have internalized such praise as a journalistic writing accomplishment, when punctuation is actually a grammar task that is necessary in journalistic writing. The simple fact that the writing is conducted in a media environment may have led students to perceive any improvement in writing as a journalistic writing improvement, rather than a grammar improvement. This would appear to be true at the college level, but not necessarily the high-school level.

While high-school newspaper advisers, teachers, and editors focus more on grammar than journalistic style, students still perceive high-school experience as strengthening both grammar and journalistic writing ability. This is likely due to the necessity of strong grammar usage in journalistic writing. As students move into college media experiences, the feeling that grammar is improving likely shifts to a feeling that journalistic writing is improving. College media demand a more professional level of what Pajares *et al.*, (1999) calls domain-specific writing. While high-school media serve as an introduction to journalistic writing—where feelings of both grammar and journalistic writing efficacy are nurtured—it is not until college that students delve into becoming truly proficient at journalistic writing. The domain for writing in college media is that of a professional media environment. In domain-specific writing, the writer demonstrates characteristics of adherence to a specific style and writing guidelines. When writing, students in college media are expected to adhere to AP style. Adherence to specific guidelines of domain-specific-writing offers students practice, opportunity to improve, and ultimately mastery of

experiences. These experiences would increase students' feelings of efficacy towards the domain-specific task (i.e., journalistic writing). College media outlet experiences to students who are seeking a career in journalism are very important. These opportunities, like classroom learning, provide students chances to master tasks and build efficacy towards journalistic writing.

### **Completion of courses as a predictor of journalistic self-efficacy**

*H4: Students who have taken more journalism courses have higher journalism self-efficacy.*

Hypothesis four, students who have taken more journalism courses have higher journalism self-efficacy, was supported. An ANOVA revealed statistically significant relationship between courses taken and journalistic writing self-efficacy ( $F_{3, 458} = 22.147; p = 000, \eta^2 = .1267$ ). Students who were taking the later journalism classes had higher journalism self-efficacy than those taking the lower-level classes. Post hoc analysis revealed a statistically significant difference between cohort 1 (introduction to mass communication) and cohort 2 (introduction to journalism and electronic media) ( $M_{mass} = 44.18, M_{jem} = 52.47$ ); cohort 1 and cohort 3 (news writing) ( $M_{mass} = 44.18, M_{news} = 57.67$ ); and cohort 1 and cohort 4 (reporting) ( $M_{mass} = 44.18, M_{reporting} = 57.76$ ). These findings are logical, given that the first class in the journalism progression (introduction to mass media) focuses on human, mass, and mediated communication, with more of an emphasis on social, historical, and legal issues, rather than practical skill building. While the second class (introduction journalism and electronic media) still focuses more on media context than skill building, students are required to participate in one of the university's media outlets. The boundaries between participation in a media outlet and class activities may be blurred here. Even though students are working for a university media outlet, the fact that their class grade depends on their participation may cause this activity to be

viewed as class work. This would explain why a statistical difference exists in self-efficacy views from cohort 1 to cohort 2.

Students in the two higher-level courses (news writing and reporting) held higher journalistic writing self-efficacy, a finding that helps validate the newly-created journalistic efficacy scale. Given that these courses focus on students developing journalistic writing skills, students logically were exposed to efficacy-building experiences, such as mastery of journalistic writing tasks, verbal praise and evaluation, and the success of classmates (Bandura, 1997). Students who were successful in these classes should ultimately gain confidence in achieving a task and experience less negative somatic arousal when engaging in journalistic writing tasks (Bandura, 1986), as well as hold beliefs of journalistic writing self-efficacy. Conversely, students who struggled in these classes likely held lower self-efficacy and greater feelings of failure. Much like feelings of grammar efficacy, it is clear that continued practice and repetition of experience build journalistic efficacy beliefs in students. Again, no plateau of efficacy beliefs is observed in journalistic writing through the four classes, suggesting that along with background and experiences, ongoing learning is a necessity in efficacy development.

### **Background, learning strategies, and experiences as predictors of writing self-efficacy**

*RQ7: To what extent do background, learning strategies, and experiences predict writing self-efficacy (grammar and journalistic)?*

Question seven, to what extent do background, learning strategies, and experiences predict writing self-efficacy (grammar and journalistic), sought to understand the depth of impact the combination of variables has on writing self-efficacy. A stepwise linear regression for grammar self-efficacy with experiences as the first step, learning strategies as the second step, and background as the third step reveals a statistically significant model ( $F_{4, 440} = 3.332; p =$

.011;  $R^2=.152$  ) where class ( $t = 4.675$ ;  $p = .000$ ), high-school newspaper experience (self-efficacy;  $t = 3.975$ ;  $p = .000$ ), critical thinking skills ( $t = -3.479$ ;  $p = .001$ ), time/environmental management ( $t = 3.261$ ;  $p = .001$ ), and intrinsic motivation ( $t = 3.080$ ;  $p = .002$ ) predict higher grammar skills (See Tables 15 and 16). This model shows a direct link between some strategies for learning and grammar efficacy. While strong time/environmental management skills are

Table 15  
Difference in Variance Between Grammar Efficacy Models

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.204a	.042	.040	16.647	.042	19.545	1	448	.000
2	.280b	.078	.074	16.345	.036	17.656	1	447	.000
3	.380c	.144	.135	15.802	.066	11.432	3	444	.000
4	.412d	.169	.152	15.638	.025	3.332	4	440	.011

a Predictors: (Constant), Class

b Predictors: (Constant), Class, High school newspaper

c Predictors: (Constant), Class, High school newspaper, Time/study management, Critical thinking, Task value

d Predictors: (Constant), Class, High school newspaper, Time/study management, Critical thinking, Task value, Sex, Field, Reason for class, Intrinsic motivation

Table 16  
Beta Coefficients for Grammar Self Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	72.594	1.740		41.710	.000
Class	3.189	.721	.204	4.421	.000
2 (Constant)	71.348	1.735		41.134	.000
Class	2.989	.710	.192	4.210	.000
High school newspaper	7.952	1.892	.191	4.202	.000
3 (Constant)	55.410	3.847		14.405	.000
Class	3.265	.709	.209	4.603	.000
High school newspaper	7.598	1.865	.183	4.074	.000
Task value	.309	.114	.152	2.702	.007
Critical thinking	-.403	.139	-.157	-2.896	.004
Time/study management	.387	.104	.193	3.735	.000
4 (Constant)	47.231	5.498		8.591	.000
Class	3.445	.737	.221	4.675	.000
High school newspaper	7.417	1.866	.178	3.975	.000
Task value	.117	.138	.058	.852	.395
Critical thinking	-.507	.146	-.198	-3.479	.001
Time/study management	.338	.104	.168	3.261	.001

Table 16 Continued

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
Sex	.782	1.583	.022		.494	.621
Reason for class	1.608	1.044	.074		1.539	.124
Field	.147	.320	.020		.459	.646
Intrinsic motivation	.719	.233	.207		3.080	.002

Dependent Variable: Grammar Self-Efficacy

shown to directly impact grammar self-efficacy, low critical thinking ability also impacts grammar efficacy. In examining experience variables, class and high-school newspaper experience directly impact grammar efficacy. A direct link is also drawn between intrinsic motivation and only grammar efficacy, suggesting motivation may not be properly positioned as a background variable.

In regard to journalistic writing self-efficacy, a stepwise linear regression for journalism self-efficacy, with experiences as the first step, skills as the second step, and background as the third step, revealed a statistically significant model ( $F_{4, 439} = 3.168; p = .014; R^2 = .261$ ) where class ( $t = 4.458; p = .000$ ), high-school newspaper experience ( $t = 3.551; p = .000$ ), college newspaper experience ( $t = 2.197; p = .029$ ), and intrinsic motivation ( $t = 3.189; p = .002$ ) predict higher journalistic writing-efficacy (See Tables 17 and 18).

For journalistic efficacy, the model reveals that experience variables (class, high-school newspaper experience, and college newspaper experience) again are directly linked to efficacy. Intrinsic motivation also is directly linked to journalistic writing efficacy. Setting background

variables aside, the models show a direct relationship between experience and learning strategies for grammar efficacy and experience for journalistic efficacy.

Table 17

## Difference in Variance Between Journalistic Writing Efficacy Models

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.343 <sup>a</sup>	.117	.115	16.117	.117	59.549	1	448	.000
2	.405 <sup>b</sup>	.164	.160	15.701	.047	25.014	1	447	.000
3	.428 <sup>c</sup>	.183	.178	15.537	.019	10.497	1	446	.001
4	.507 <sup>d</sup>	.257	.247	14.871	.074	14.612	3	443	.000
5	.527 <sup>e</sup>	.278	.261	14.728	.021	3.168	4	439	.014

a. Predictors: (Constant), Class

b. Predictors: (Constant), Class, High school newspaper

c. Predictors: (Constant), Class, High school newspaper, College media

d. Predictors: (Constant), Class, High school newspaper, College media, Time/study management, Critical thinking, Task value

e. Predictors: (Constant), Class, High school newspaper, College media, Time/study management, Critical thinking, Task value, Sex, Field, Reason for class, Intrinsic motivation

Table 18

Beta Coefficients for Journalism writing self efficacy

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	39.934	1.685		23.699	.000
	Class	5.390	.698	.343	7.717	.000
2	(Constant)	38.508	1.666		23.112	.000
	Class	5.161	.682	.328	7.567	.000
	High school newspaper	9.092	1.818	.217	5.001	.000
3	(Constant)	39.430	1.673		23.567	.000
	Class	3.739	.805	.238	4.645	.000
	High school newspaper	8.030	1.828	.191	4.392	.000
	College media	5.875	1.813	.168	3.240	.001
4	(Constant)	18.676	3.716		5.026	.000
	Class	3.729	.787	.237	4.741	.000
	High school newspaper	6.430	1.777	.153	3.618	.000
	College media	4.042	1.761	.116	2.295	.022
	Task value	.364	.108	.177	3.380	.001

Table 18 Continued

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Critical thinking	.199	.131	.077	1.519	.130
Time/study	.170	.098	.084	1.737	.083
management					
5 (Constant)	18.213	5.203		3.500	.001
Class	3.553	.797	.226	4.458	.000
High school	6.301	1.774	.150	3.551	.000
newspaper					
College media	3.879	1.766	.111	2.197	.029
Task value	.140	.130	.068	1.082	.280
Critical thinking	.057	.137	.022	.415	.678
Time/study	.150	.098	.074	1.533	.126
management					
Intrinsic motivation	.703	.220	.200	3.189	.002
Sex	-1.460	1.491	-.041	-.980	.328
Reason for class	-.718	.985	-.033	-.729	.466
Field	.410	.304	.057	1.351	.178

Dependent Variable: Journalism writing self-efficacy

The stepwise regression confirms that students in later journalism classes hold higher grammar self-efficacy and journalistic writing self-efficacy beliefs than those in lower

journalism classes, a finding supported by previous research (Bandura, 2006; Pajares *et al.*, 1999). Students in later classes have had multiple chances to improve their writing skills, and thereby increase their efficacy beliefs. Students feel that their journalistic classes are preparing them to produce grammatically correct journalistic work. Given that high feelings of efficacy (Banura & Locke, 2003) contribute to motivation and performance, students who have high efficacy beliefs were motivated to perform well and continue through their journalistic studies. As Pajares (1996) suggests, each subsequent journalism class, and individual journalistic experience, was interpreted through the lens of success or failure the students experienced in their previous class. A series of journalistic classes that build on previous courses provide an ongoing environment where students' self-efficacy for both grammar and journalistic writing builds through mastery experience, vicarious experience, verbal persuasion, and reduced cognitive distress. A social cognitive view confirms that success in a series of courses should develop knowledge structures (consisting of rules and strategies) that students can draw from to be successful (Bandura, 1997). For journalism students who were successful in navigating the journalism curriculum, these structures translate into task proficiencies that produce skills, standards, and behaviors for success. Clearly, journalism schools still play an important role in educating journalists. Students' perceived proficiencies in journalistic and grammar tasks, based on their classroom experience, set them on a path toward success in journalistic writing. However, the college classroom is not the first experience that enhances efficacy beliefs for journalism students.

The stepwise linear regressions for grammar skills and journalistic writing self-efficacy confirm that students with high-school newspaper experience have higher grammar and journalistic writing self-efficacy. These findings illustrate the importance of high-school

publications in the field of journalism and on students who want to pursue a career in journalism. Self-efficacy beliefs are often associated with motivation, performance, and achievement in past and future endeavors (Pajares 1996, 1997). The early development of writing self-efficacy has been shown to lead to greater interest in writing, attention to writing, stronger effort, and greater perseverance and resiliency in the face of adversity (Pajares, 2003) as well as progress toward meeting goals (Pintrich & Schunk, 1995). Students who begin writing journalistic material in high school have had more opportunities to be exposed to sources of efficacy. Also, efficacy toward these skills is likely bolstered in high school through peer acknowledgment and through verbal affirmation from a newspaper adviser. Self-efficacy is made up of levels of past experience and aptitudes. Personal factors, classroom rewards, and teacher feedback provide students with insight into how well they are progressing and help students evaluate their self-efficacy for continued success in an area of study (Pintrich & Schunk, 1995). High-school newspaper environments were likely more nurturing towards skill development, allowing students to develop their sense of self-efficacy toward grammar and journalistic writing tasks. Efficacy belief development switches from grammar and journalistic writing to just journalistic writing as students move from high-school newspaper experiences to college media experiences.

Students with college media experience were found to have higher journalism self-efficacy, while no significant relationship was found between college media experience and grammar efficacy. Given that high-school newspaper experience did predict higher grammar self-efficacy but college media experience did not, it is likely high-school newspaper experience centers around using proper grammar, while college media experience centers around using more professional journalistic writing practices. While grammar remains important in college media experiences, much of the focus of college media writing is on AP style, which matches a large

portion of the writing style used in professional media. This focus on journalistic style provides additional skill development and mastery experiences, which support higher self-efficacy (Bandura, 1986, 1989, 1993; Pintrich & Schunk, 1995).

Clearly, experience is one of the key factors in developing grammar efficacy and journalistic efficacy. Both high-school media education and college journalism education (classroom and media outlets) provide valuable experiences where students gain perceived mastery of grammar and journalistic skills. The concern that journalism schools are not training students to enter the field of journalism (Carnegie, 2005) would appear to be unfounded based on students' evaluation and perception of their own journalistic abilities. Students feel they are gaining journalistic-writing skills as they progress through their journalistic experiences. These experiences provide opportunities for students to employ learning strategies, which have a somewhat confounding relationship to efficacy.

Stepwise linear regression shows that students with higher critical thinking skills have lower grammar self-efficacy. However, no significant relationship was found between critical thinking and journalistic writing-self-efficacy. On the surface, these findings seem contradictory. However, high self-efficacy in grammar would indicate students feel comfortable (a high level of mastery) with the task, and practicing good grammar may be second nature to them (passive thought), requiring very little or no thought (Bandura 1978, 1986; Pajares, 1996). However, the very nature of critical thinking is to engage in active use of the intellect, knowledge, and skills and to carefully consider and explore situations, which are all active thought processes (Chaffee, 1985). Students who think critically may view their grammar skills more critically, evaluating their ability and success by a different mental metric than students who are less critical-thinking oriented. When studying self-efficacy, measures need to be sensitive to specific variables, such

as stereotype, social position, and sex (Schwarz, 1999). While a connection between such variables and critical thinking is not clear, it could be suggested that that critical thinking may require a more sensitive measurement tool when evaluating grammar self-efficacy.

While a significant relationship was not found between journalistic writing self-efficacy and time/environment management, results do show that students with higher time/environment management strategies have higher grammar self-efficacy. Literature supports students' success in developing skills when environmental management is implemented (Deese & Deese, 1979). Students who utilized proper study procedures developed stronger skills. Given that the questions concerning time/environment management focused on students' study habits related to their journalism class, it is logical that students would have higher efficacy in grammar. However, an explanation to why journalistic efficacy would not also be impacted by time/environment management is not clear. While no statistically significant relationship exists, it is logical that time/environment management should practically bolster journalistic writing efficacy as well.

Finally, the stepwise linear regressions show that intrinsically motivated students have higher grammar self-efficacy and higher journalistic writing self-efficacy. Again, in both models, intrinsic motivation is the only background variable with a direct relationship to efficacy beliefs. Motivation and self-efficacy are closely linked, with feelings of self-efficacy regulating motivation and shaping aspirations and outcome expectancies (Bandura, 1997). Pintrich & Schunk (1995) found that motivated students are interested in learning and hold high levels of self-efficacy towards specific tasks support these findings. Since motivation requires a goal and intrinsically motivated students want to better themselves, it is logical that intrinsically motivated

students have learned and internalized grammar and journalistic writing skills (the goal) to a point they hold beliefs that they are good at the tasks.

Given the clear existence of a relationship between motivation and efficacy, but no relationship between efficacy and other background variables, it is likely that intrinsic motivation is misplaced as a background variable in this conceptualization. Motivation and learning strategies are often studied together. Duncan and McKeachie (2005) describe motivation as dynamic and contextually bound, while learning strategies are learned and controlled for the purpose of reaching goals. So, a student who is motivated to learn good journalistic writing (the goal, bound by the context of journalistic skill development) would employ learning strategies to reach her or his goal. Motivation is a cognitive process where goal-directed behaviors (learning strategies) are instigated (Pintrich & Schunk, 1995). While motivation and learning strategies are clearly connected, in that motivation leads to the utilization of learning strategies, it does not appear that motivation fits as a learning strategy variable nor is motivation an experience. Motivation leads students to participate in experiences based on an expectation of an outcome (Eccles 1983, 1987; Feather, 1988; Wigfield & Eccles 1992).

### **Sex as a predictor of writing self-efficacy**

*H5: Women have higher overall writing self-efficacy than men.*

Hypothesis five, women have higher overall writing self-efficacy than men, was rejected. An independent samples *t*-test shows that in this study there was no statistically significant difference between men and women when it comes to overall writing self-efficacy. These findings contradict the majority of research showing that women hold higher writing self-efficacy than men (Eccles *et al.*, 1989; Pajares & Valiante, 1997, 2001; Pajares, *et al.* 1999; Wigfield, *et al.*, 1991). One exception to these findings was Pajares and Johnson's (1996) study

that revealed ninth-grade boys held stronger writing self-efficacy beliefs than did ninth-grade girls. Differences in writing self-efficacy between sexes were not significant if previous achievement was controlled (Pajares & Valiante, 1999; Pajares *et al.*'s, 1999). Given that the overall writing self-efficacy scale was altered to include journalistic tasks, the results may reflect journalistic writing self-efficacy more than a true overall writing self-efficacy. When looking at the results from the writing efficacy scale indicators that were not adapted (Shell *et al.*'s., 1989) to focus on journalistic writing, a *t*-test indicates that women ( $t_{(448)} = -2.70; p = .007$ ) do hold higher writing self-efficacy beliefs than men.

### **Predictors of actual journalistic writing ability**

*RQ8: To what extent do background, skills, experiences, grammar self-efficacy, and journalistic self-efficacy predict actual writing ability?*

Question eight, to what extent do background, learning strategies, experiences, grammar self-efficacy, and journalistic self-efficacy predict actual writing ability, revealed somewhat perplexing results. Stepwise linear regression for actual writing ability with journalistic and grammar self-efficacy as the first step, experiences as the second step, educational strategies as the third step, and background as the last step revealed a statistically significant model ( $F_{1, 444} = 8.988; p = .003; R^2 = .039$ ) where class ( $t = 3.902; p = .000$ ) and critical thinking ( $t = -2.998; p = .003$ ) were the only predictors of actual journalistic writing ability (See Tables 19 and 20). The model reveals that students in later journalism classes show stronger writing ability than those in lower journalism classes, and that students with lower critical thinking ability have higher journalistic writing ability.

While it is logical that students in more advanced classes are better writers, the practical significance of these findings is somewhat unclear, with only 3.9% of variance in actual writing

ability being explained. However, these results do illustrate the importance of the role journalism schools play in the preparation of future journalists. While several variables contributed to the development of students' perceptions of their journalistic ability (journalistic writing self-

Table 19

Difference in Variance Between Journalistic Writing Ability Models

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.175 <sup>a</sup>	.031	.022	5.775	.031	3.508	4	445	.008
2	.223 <sup>b</sup>	.050	.039	5.724	.019	8.988	1	444	.003
3	.237 <sup>c</sup>	.056	.037	5.730	.007	.763	4	440	.550

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a Predictors: (Constant), Class, High school newspaper, High School Yearbook, College media

b Predictors: (Constant), Class, High school newspaper, High School Yearbook, College media, Critical thinking

c Predictors: (Constant), Class, High school newspaper, High School Yearbook, College media, Critical thinking, Sex, Field, Reason for class, Intrinsic Motivation

Table 20

## Beta Coefficients for Journalistic Writing Ability

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	14.693	.626		23.468	.000
High school newspaper	.352	.697	.025	.505	.614
High school yearbook	.017	.651	.001	.026	.979
College media	-.580	.675	-.049	-.860	.390
Class	1.041	.301	.194	3.460	.001
2 (Constant)	17.016	.993		17.144	.000
High school newspaper	.717	.701	.050	1.023	.307
High school yearbook	-.084	.647	-.006	-.130	.896
College media	-.392	.672	-.033	-.583	.560
Class	1.177	.302	.219	3.902	.000
Critical thinking	-.129	.043	-.146	-2.998	.003
3 (Constant)	15.151	1.861		8.141	.000
High sch. newspaper	.799	.707	.056	1.131	.259

Table 20 Continued

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
High school yearbook	-.176	.654	-.013		-.269	.788
College media	-.269	.685	-.023		-.393	.694
Class	1.257	.308	.234		4.078	.000
Critical thinking	-.099	.052	-.112		-1.906	.057
Intrinsic motivation	-.043	.069	-.036		-.627	.531
Sex	.588	.583	.048		1.008	.314
Reason for class	.479	.375	.065		1.279	.201
Field	.032	.118	.013		.273	.785

Dependent Variable: Journalistic Writing

efficacy), only classroom experience aided in the development of actual skills. A social cognitive perspective suggests that students develop knowledge structures based on observational learning, experiential activities, verbal instruction, and innovative cognitive synthesis of the acquired knowledge. These knowledge structures are evident in the students who demonstrated proficiencies, production of skilled actions, and standards for adjusting actions and behavior toward success (Bandura, 1997). Journalism students' demonstration of writing ability suggests the existence of knowledge structures that aid in being successful at journalistic writing. Students who demonstrate actual writing ability are clearly what the field of journalism needs.

The lack of efficacy-predicting ability was contradictory to the majority of research on writing self-efficacy and writing ability (Burning & Horn, 2000; Graham & Harris, 2005; Pajares

& Johnson, 1994; 1996; Pajares, *et al.*, 1999; Pajares & Valiante, 1997, 1999, 2001; Rankin, *et al.*, 1994; Shunk & Swartz, 1993; Shell, *et al.*, 1995; Shell *et al.*, 1989; Wachholz & Etheridge, 1996; and Zimmerman & Bandura, 1994). Further bivariate Pearson correlations confirmed no significant relationship between actual journalistic writing ability and traditional writing efficacy indicators, grammar efficacy indicators, or journalist writing efficacy.

These findings suggest a few possible explanations. First, it is possible that students misjudge their ability to produce journalistic writing. This would be an example of an inaccurate mental metric (Noddings, 1996; Pajares & Valiante, 1999; Pajares *et al.*, 1999; Wigfield, *et al.*, 1996). After finding a moderate, positive correlation between self-efficacy and writing, but not self-efficacy and ability to use grammar, Bissell and Collins (2001) concluded that the lack of correlation was due to students not being able to evaluate their own lack of ability in grammar use. Students may hold high beliefs about their abilities, but may not be able to produce journalistic writing that matches their perceived ability. For example, a student may believe she or he understands the inverted pyramid, modest writing, and AP style, but an actual writing sample might be riddled with illogical lines of thought, spelling mistakes, and personal opinion. Students may have indeed mastered certain areas of journalistic writing, but may be lacking in other overlapping or complimentary areas. It may be that students hold a basic understanding of journalistic writing but are not able to successfully apply their skills to the requirements of the writing sample.

For the writing sample, students were instructed to use journalistic writing style, including correct AP style and grammar, to write a short explanation of the importance of good writing. The writing task mimicked that of Shell *et al.*, (1989), which measured writing efficacy in a more traditional writing style. Journalistic writing style may be such a unique style of

writing that the writing sample did not capture students' actual journalistic writing ability. However, this explanation is diluted by the lack of correlation among traditional writing efficacy indicators, grammar indicators, and actual writing ability. Another possible explanation is that the addition of more options to Shell *et al.*'s (1989) writing ability coding criteria still did not provide enough variance in coding to produce diverse enough raw writing scores to show statistically significant differences. The lack of predictive capability for journalistic writing was not the only puzzling result.

The linear regression identified low critical thinking ability as another predictor of actual writing ability. Given industry leaders' calls for journalists who can think analytically, this is problematic for the field of journalism at best. In addition to journalistic writing skill development, students are exposed to theory, law and other more contextual ideas during their journalistic course work. Thinking critically differs from learning a skill or gaining knowledge (McKeachie, *et al.*, 1986), with learning being the result of instruction in a classroom and critical thinking being applying knowledge to a situation beyond the scope of the learning environment. Journalism students who are actually able to produce journalistic writing evidently absorbed the writing skills presented in class, but may not have internalized the contextual material that provides journalists an understanding of the field and its place in society. These findings suggest classes are preparing future journalists to write journalistically proficient content, but they are not preparing students to use their intelligence and knowledge to think through problems on their own. Chaffee (1985) notes that students who think critically carefully consider and explore situations, are open to new and alternative ideas, base and support ideas with fact, and clearly articulate ideas. These findings suggest students are being trained to clearly articulate ideas, but nothing else.

In summary, a variety of variables play into journalistic education. Background variables affect aspects of strategies students use to learn and the experiences students undertake. Experience plays a role in students' efficacy belief development regarding grammar and journalistic efficacy. Intrinsic motivation also impacts experience, learning strategies and efficacy. While the development of strong efficacy skills is often linked to ability, and strong efficacy skills produce students who can often undertake related skills, the ultimate goal of journalism writing education should be for students to not only believe they can write, but to actually be able to produce solid journalistic writing. While experience, learning strategies, and intrinsic motivation often lead journalism students to beliefs of high ability, only classroom and media experiences provide students with actual writing skills. Another important goal of journalism education should be to teach students to think critically and be able to apply past knowledge and experience to their current work situations. A relationship exists between students who are intrinsically motivated journalism majors and critical thinking. However, students who have higher proficiencies in journalistic writing have a lower ability to think critically, suggesting a problem for students who are entering the field of journalism and for teachers attempting to instill both writing and analytic skills into students.

## **Conclusion**

This study sought to understand how certain variables play into the development of journalistic writing skills. Advancing through a college major's requirements is a journey that requires a beginning point, engaging in plans and strategies for achieving a goal, and successfully reaching the destination. Variables such as sex, reason for taking a class, anticipated career field, and intrinsic motivation make up students' background, or the starting point of the journey. Reasons for taking a class, anticipated career field, and intrinsic motivation provide a foundation for what Bandura (1997) described as expectancy outcomes. Students who participate in journalistic coursework are engaging in goal-directed, purposeful behavior (Tolman, 1932). In other words, students envision a destination, making the journey worth taking.

Students taking journalism classes as part of their major do so because their expectation is to prepare for a career in their field of study. From a social-cognitive perspective, students begin an educational undertaking with the goal of mastery (Pintrich & Schunk, 1995). On their academic journey, students undertake dynamic learning tasks and strategies to master material and reach their goal. In writing self-efficacy and ability studies, sex often predicts varying levels of success (Pajaraes, 2003). These background variables provide a picture of where students are coming from and the goals to which they aspire.

Students develop motivation and employ learning strategies (task value, time/environment management, and critical thinking) to reach their goals (Duncan & McKeachie, 2005). Continuing the analogy of a journey, learning strategies would be akin to strategies for driving cross-country. A driver must see value in making a trip (task value) or the travelers are unlikely to begin the journey or see it through to completion. A driver must manage time, making sure to avoid unnecessary stops that might prevent goal achievement. Similarly, if

a driver is not aware of the environment, he/she could miss a tree lying across the road that could hinder one's progress. If a driver does not apply analytical skills (critical thinking) to driving, he or she could spend countless hours following incorrect directions from a defective global positioning system (GPS). Students employ these same learning strategies to avoid pitfalls, misdirection, and delays in reaching their academic goals.

Finally, experiences are the variables that comprise the educational journey, such as past high-school journalistic experience, yearbook experience, and college media experience. For some students, the journey begins with working on a newspaper in high school. For others, their journalistic coursework is their only experience. Wherever a student begins the journey, the goal is mastery of a skill set. In the case of journalistic study, one such skill is the ability to write quality journalistic content. By examining the aforementioned variables we develop an understanding of factors that play into both journalistic writing self-efficacy and actual journalistic writing ability.

For many years, students studying for a career in journalism have found themselves preparing for an industry in turmoil. Knowing what areas of media to study, knowing how to approach journalism course work, and knowing what skills to develop has become somewhat of a guessing game. Similarly, journalism faculties have been adjusting curricula, classes, and assignments in an effort to hit the ever-elusive mark of preparing students for the field of journalism. Finally, industry leaders are continually sacrificing the sacred journalistic cow of traditional journalistic approaches and have changed traditional journalistic roles, created more economically lean business models, and are looking for new, and often technology-driven, ways to deliver news to their audiences.

New media, technologies, audiences, demands for quicker news turn-around, and the

need for journalists to be experts in a variety of skill sets and news areas have left a much different media landscape today than that of 20 years ago. Adding to the frustration of many journalism educators, the 2005 Carnegie report showed that many industry leaders took a lack-luster view of traditional journalism schools and their preparation of future journalists, while the *2010 Annual Survey of Journalism and Mass Communication Graduates* showed that half of the student respondents felt they lacked skills necessary to be successful and competitive in the field of journalism (Becker, *et al.*, 2010). While the 2011 Carnegie-Knight Initiative stressed the need for journalism students with multiple skills and the ability to utilize new technology, both the 2011 and 2005 reports indicated the need for journalists who are trained in the “basics of the journalism craft” (Carnegie, 2005, p. 3). The reports stressed the need for journalism students who were well-trained in journalistic writing and who could think critically and analyze news and information. The Carnegie reports provide a clear signpost for both journalism educators and students. While acknowledging the need for new skills to meet the current field of journalism’s demands, the Carnegie reports reaffirm the need for solid writing skills as a criterion for success in journalism.

### **Deductions**

Given past research, it was clear at the outset of this study that efficacy towards writing tasks strongly predicts actual writing ability. The expectation for this research was to find that background variables, such as taking a class in preparation for a career in journalism and intrinsic motivation would lead to journalistic experience. As a starting point of an academic journey, background would lead to both high-school and college journalism experience. To navigate these experiences, it was expected that students would employ learning strategies, which would increase journalistic writing efficacy, and thereby increase journalistic writing

ability.

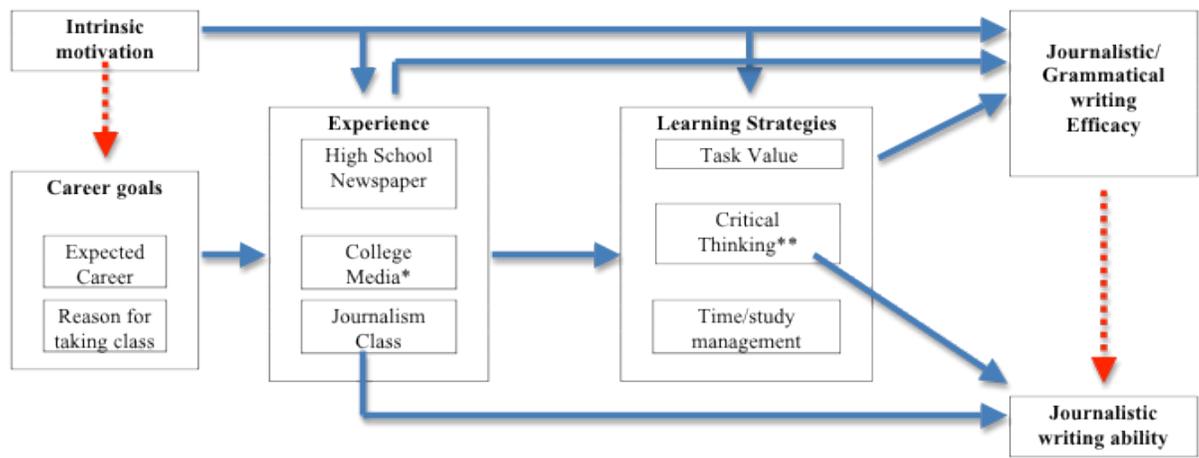
To further illustrate this expected model, consider a student in high school who is the editor of the high-school newspaper and works on the high-school yearbook, both related to journalistic skills. This student enjoys the work in these areas and finds great personal satisfaction in completing tasks, therefore, finds high value in the experiences. Upon high-school graduation, the student enrolls in a university and majors in journalism. The student hopes, upon graduation, to work in Web journalism. Based on the student's anticipated career field, his intrinsic motivation toward journalistic tasks, and his decision to pursue a degree in journalism, he further engages in journalistic experiences. For the student, journalistic experiences definitely include journalistic course work, and may include working for a college media outlet, such as the online student news publication. To be successful at his journalistic undertakings: The student employs critical thinking skills in relation to course work and other media experiences; the student sets aside time and space to study and work on his stories for the college news website; and the student gleans as much value from the course tasks as possible. These experiences, pursued through the implementation of learning strategies, build confidence in the student towards journalistic writing. This confidence, in turn, should then indicate actual proficiency in journalistic writing. By the time the student graduates, he should be able to exhibit excellent journalistic writing skills and grammar use. He should be confident in his ability to perform journalistic writing tasks, and he should be able to apply learning strategies to future journalistic tasks.

The current research finds a somewhat differing picture of journalistic writing education (See Figure 1), and suggests:

- That journalism education and experience are key factors in the development of future

Figure 1

Model of Journalistic Writing Development



\* No relationship to grammar efficacy

\*\* Negative relationship to grammar efficacy

journalists' writing efficacy, but only classroom experience leads to journalistic writing ability.

- Intrinsic motivation is not a background variable, but rather a variable unto itself, directly impacting background, experience, learning strategies, and efficacy.
- Once sex (for lack of statistical significance) and intrinsic motivation were removed from background, the category is much more focused on career goals.
- Students who took a journalism class because it was in their major and who anticipated a journalistic-centric career, engaged in journalistic activities and strived to develop efficacy and skills.
- The relationship between career goals and experience appears to be non-linear, in that high school experiences leads to career goals, but career goals also lead to college class and media experience.
- While experiences are valuable in the development of believing in one's journalistic skills, class experience was the only variable that positively impacted actual journalistic

writing ability.

- Students who were developing their skills as journalistic writers were less likely to apply analytic thought to their work. This research suggests that journalism classes are providing students the technical skills they need and that industry leaders have called for (Carnegie, 2005), but they are not training journalism students to think critically.
- Students may overestimate their ability to perform journalistic writing tasks. While many students indicated high efficacy towards both grammar and journalistic writing tasks, efficacy did not translate into actual ability.
- Despite the lack of direct connection between efficacy and ability, feelings of intrinsic motivation and career goals do impact classroom experience (the only predictor of ability) and the strategies students use to be successful in class.
- Intrinsic motivation is a key factor in journalistic writing education. Intrinsic motivation impacts students' career goals, experiences, learning strategies employed, and efficacy.
- Results consistently showed the importance of experience in the development of confidence in journalistic-related writing tasks and journalistic writing ability. Students majoring in journalism, and who had made the most progress towards completing their educational objectives, were more involved in both curricular and extra-curricular journalistic educational experiences.
- Not only do high-school and college media experiences complement success in journalism courses, they also provide students hands-on tasks from which students can gain additional experience and skills. In addition, student publications provide students who engage in activities for the love of the activity (intrinsic motivation) an outlet to experience additional skill-building opportunities.

## **Implications**

A variety of implications can be drawn from this research, which could help shape views of journalistic writing among high-school principals/educators, college journalism programs and their students, and industry.

**High-school principals/educators.** Students majoring in journalism were more likely to have worked on a high-school newspaper. The fact that many journalism majors begin learning the journalistic process in high school highlights the potential value and importance of high-school media outlets. High-school media outlets provide earlier mastery experiences and opportunities for feedback and skill and efficacy development. Students who have aptitudes for journalistic writing have the opportunity to develop their skills and develop deeper intrinsic motivation toward journalism as a possible career. The fact that students with high-school newspaper experience have higher grammar self-efficacy and journalistic writing self-efficacy highlights the need for quality journalistic education in high schools. Teachers have the opportunity to instill both grammar and journalistic skills in students, as well as teaching students how to think critically.

High-school newspaper experience clearly provides a first step into journalistic education. Teachers who endeavor to teach students about journalistic practices are probably not aware of their impact on future journalists. This impact behooves educators to teach skills beyond good grammar, such as concepts of professional journalistic writing, appropriate journalistic behaviors, and utilization of newer media platforms.

Clearly a relationship exists between journalistic writing and the use of proper grammar. If high-school journalism teachers introduce students to Associated Press guidelines, it will provide them more opportunities to master the skill. High-school students could also be taught

concepts of modest, clear, precise, and efficient writing at an earlier age. These skills could then be applied to college and professional media undertakings.

Early exposure to professional journalistic behaviors and standards would also benefit students. High-school students could be taught proper interview skills, ethical behavior, and how to conduct themselves when covering stories. Students could also be prepared for the fast-paced environment of journalistic work. Again these learning opportunities could better prepare future journalists.

Finally, with the decline of print newspapers and high cost of producing them, high-school newspaper students are learning antiquated journalistic style when school districts could be better preparing them for the world they are likely to enter. It would be beneficial to high-school students to begin publishing work on the Web, a lower-cost alternative to print newspapers. High-school student Web publications can be less expensive than traditional publishing and help students develop more accurate perceptions about and valuable skills for the current and likely future field of journalism. Web publishing would not only help students become accustomed to new journalistic practices, but could offer benefits to principals and administrators. One benefit would be that the cost of Web publishing is often significantly lower than the cost of print. Given the tight economic situations most high schools face, this would provide an avenue for savings while providing a better program for students. Switching to Web publishing would also free a teacher up to focus on quality of writing standards, rather than design and layout. A Web publication allows students to publish on a more regular basis, giving the school a louder voice in the community, a benefit to the principal who is trying to show community members how education translates into practice and showcase the positive academic pursuits that often take a backseat to athletic endeavors. Stories about the school provide

information to the community, keep parents updated, and allow interested parties to know what is going on at the school.

However, a possible perceived draw back to Web publishing is that principals would have to place faith in the students and teachers to produce quality journalistic work. To ensure standards of quality, most administrations would probably choose to develop a monitoring system for the school publication. Administrators would need to strike a balance between providing students freedom to learn the journalistic process (even if it means learning from one's mistakes) and at the same time safeguarding the school and students from potential accusations of defamation or publishing false/malicious information. If an error must be made in this area, it would be better to allow students to gain journalistic experience, in a more protected environment, and trust that they will learn to regulate journalistic freedom in college.

A possible solution to issues of journalistic freedom could be concurrent enrollment journalism course opportunities between colleges and high schools. Not only could this provide sounder teaching to high school journalism students, but it would also give journalism schools earlier access to up-and-coming journalists. Given the importance of high-school media experiences in the development of journalism majors, earlier access to college teaching could help to bolster students' skill development. Waiting to begin journalistic training until students reach college may be too late.

**College journalism programs and their students.** The turmoil in the journalism industry has left uncertainty in journalism schools. Students are apprehensive about the field, due to downsizing and financial problems in the industry, and teachers are struggling to know what skills to focus on in the classroom. The call for foundational journalistic skills to be taught in journalism schools reminds us of the importance of teaching journalism students how to write.

Every area of journalism requires writing skills. The onus on journalism schools is to train journalists to be proficient in variety of skills built around quality writing. Given that journalism classes were found to be the only positive direct link to the development of journalistic writing skills, journalism schools must not sacrifice teaching students to write for the sake of incorporating development of multiple skill sets. All core skill development should be writing-centric.

The 2005 Carnegie report said that many journalism industry leaders were indifferent about the role of traditional journalistic educational institutions in the training of future journalists, while others thought they could play a role in the future of journalism. Not only can traditional journalism schools play an important role in journalism education, they can also provide invaluable experiences and opportunities to students who are motivated to hone their skills. College media experience, such as online publications, newspapers, magazines and class work provide many experience opportunities.

Advancement through journalism classes predicted grammar self-efficacy, journalistic writing self-efficacy, and actual journalistic writing ability. However, there was not a statistical link between efficacy and actual ability. This suggests that students may hold unrealistic views of their own ability, or lack understanding of the intricacies of journalistic writing and the skills required to produce such writing. This suggests further opportunities for journalism educators to stress the fundamentals of journalistic writing and clearly delineate it from traditional writing. Similarly, faculty members must be brave enough to be brutally honest with students as they move through the curriculum and let them know when their writing is not up to par. While grade inflation appears to be rampant (Rojstaczer & Healy, 2012), journalism instructors need to be willing to provide opportunities for students to fail and learn from their mistakes and also be

willing to be brutally honest with students to help them create less of a chasm between their perceptions and their journalistic abilities.

Classroom experiences are critical in the development of grammar performance beliefs, journalistic writing beliefs, and actual journalistic writing ability. The fact that students in later journalism classes held higher grammar self-efficacy and higher journalistic writing self-efficacy highlights the importance of journalism schools providing a progressive series of learning experiences to provide students with: Clear guidelines on which to base journalistic writing; real-world tasks that create opportunities for students to development journalistic writing ability; and clear and detailed feedback to help students develop knowledge structures of understanding toward journalistic writing. In addition to journalistic writing, educators need to encourage critical thinking.

The Carnegie report (2005) called for future journalists to have a solid foundation in journalistic writing and the ability to think analytically. However, the findings that class experience and a lack of critical thinking ability are predictors of good journalistic writing ability are somewhat concerning. These findings suggest that students are being trained to meet the technical demands of a journalism career, but are not being taught to evaluate information analytically. Perhaps journalism instructors need to strike a more delicate balance between skills development assignments and class tasks that would require students to make analytical decisions. Given the amount of time required to achieve the goals set out for journalism instructors, it becomes imperative for programs to resist the trend on college campuses to increase class sizes and service more students with fewer resources, especially for the later writing courses in the core curriculum. Journalism schools should also reach out to high schools and begin forming relationships, sharing resources, and aiding in the training of high-school

journalism students. While many of these findings have focused on classroom issues, it would be remiss to not touch on findings that may help students who are interested in journalism as a career.

Students in journalism classes are more successful when they approach their work from an intrinsically motivated perspective and view course tasks as valuable experiences in their preparation for a career in journalism. Students' views that class tasks are valuable are encouraging for multiple reasons: First, many tasks studied in the journalism program were actual journalistic tasks. Students covered stories, interviewed sources, wrote on deadline, and produced actual news stories. Students preparing for a career in journalism see value in the tasks they are required to do, which will also be required in the field for which they are preparing. As noted by Gottfried, (1985), people who hold an intrinsic motivation towards the tasks they are completing often strive for a higher level of achievement. Students who are intrinsically motivated towards journalistic tasks in their education will likely carry that motivation into their career as they complete similar tasks. Next, students who achieve higher standards of excellence can answer the call of industry leaders for students who are better trained to carry out the technical skills required in the field of journalism.

**Industry.** Despite changes to the industry, leaders have been consistent in their desire for education and excellence from journalists. This research suggests that students may be able to demonstrate proficiencies in journalistic tasks, but they may not be able to sufficiently analyze news and information. Industry leaders might want to focus on continuing education opportunities for new journalists and developing a more beneficial relationship with journalism schools. Depending on the specific area of journalism, additional skills may need to be acquired by emerging journalists and other skills may need to be honed or strengthened by more

experienced journalists. Another option to achieve further skill development could be mentoring relationships in which new journalists, or journalism students, work with seasoned veterans to develop their skills. Editors have always served as gatekeepers, to assure accuracy and quality in journalistic writing. Along with mentors, editors must be even more diligent in monitoring the work of new journalists. Given that students are still learning on-the-job, editors need to serve more as a coach, or teacher, to ensure skills are instilled in the new journalist.

Whether teaching journalistic writing skills to high-school or college students, or mentoring new journalists towards better success in the field, journalistic writing education requires a focus on practice and feedback. Educators need to expound the intricacies of journalistic writing and help students understand the subtle differences between it and traditional writing. Teachers need to provide real-world, hands-on tasks that will supply students opportunities to develop their skills. Students need to see the value of the tasks they are asked to perform, while at the same time taking advantage of every learning opportunity presented to them to improve and learn.

### **Limitations and future research**

In an ideal world, each piece of research would be perfect the first time around. Like the studies that have come before it, this one is not. Based upon that, a handful of limitations and suggestions for future research are presented.

The use of an online survey system caused some limitations in data collection. Several students had problems logging into the system and contacted the primary investigator for help. After further direction, they were able to log in. However, it is likely that some students were not able to log in and did not seek assistance in accessing the survey site. Being that the survey was administered online, there is a chance that students entered information multiple times or

students entered information on behalf of other students. While precautions such as having students enter a student ID to receive extra credit were utilized, it is impossible to foolproof the system and guarantee that a student did not complete it multiple times.

A further concern with the online format is that students may have rushed through the survey and not given it their full attention, knowing they would receive the extra credit no matter how much attention they put into their answers. This could have also affected the quality of the actual writing sample, especially given that it was placed toward the end of the survey. In future research, it might be beneficial to administer the survey separate from the writing sample. If the writing sample could be done in class, it might reduce the risk of survey fatigue. However, you would run the risk of not getting writing samples from every student who took the survey, or having students provide a writing sample, but not take the survey. A clear, unique identifier would also be needed to ensure that a student's survey data matched the student's writing sample.

Another limitation of the online survey system was the actual format of questions. Some questions may have been confusing or answers may have provided less sensitive information due to the way questions were presented and the way students were required to answer. For example, most efficacy scales are presented as a scale from 0 to 100. Due to technical limitations, the efficacy scale for this study was 0 to 10. Also, the writing sample field was limited. However, none of the writing samples appeared to reach the character limit. The writing sample viewing field was also small and students had to scroll through their answer to proofread, which may have been frustrating. Given the large scales that are normally used in efficacy research, and the need for a writing sample, future research might consider more traditional delivery methods for the survey. The online format may have been more problematic than beneficial.

Another concern focusing on the writing sample was the accuracy of the measure, given the instructions and the task requested. It may have been confusing to apply journalistic writing standards to a non-news story. The lack of connection between efficacy and journalistic writing ability warrants further consideration. It is clear from previous research that efficacy and ability often go hand-in-hand. The remaining question is why is that not true of journalistic writing. Another concern is the holistic writing score. Future researchers should consider breaking the holistic score down to its subcategories to get a more accurate picture of varying strengths and weaknesses in students' writing ability. Study of a more diverse population and focusing on multiple journalism programs from around the country could provide further understanding in this area. Any further studies in this area might also use a more focused journalistic writing ability instrument. Rather than having students apply journalistic writing standards to answer a question about the importance of good writing, providing students with a series of facts related to a news event and then having them write a journalistic story based on those facts might produce a better writing sample for the evaluation of journalistic writing ability. It might also allow the researcher to make an assessment of the critical thinking skills for each student.

While the factor analysis revealed interpretable factors and the reliability analysis revealed strong internal consistency for journalistic tasks, general writing tasks, and grammar/style tasks, future research needs to do a better job of examining items that have apparent relevance in two of those areas. For example, are students confused by the notion of AP style and simply assuming it is similar to MLA that they have used in their English classes so that is why it is loading on both the style and journalistic factors? Similarly, should the journalistic task be "write an editorial" rather than "write a letter to the editor" because the former is more likely for a professional journalist and the latter is more likely for a citizen? As

we move forward, strengthening the scale would provide journalism programs with a tangible way of measuring student progress as they move through the program and help them assess the extent to which students are meeting their learning objectives.

A further study of writing efficacy and ability could involve students indicating their writing self-efficacy and providing traditional and journalistic writing samples. These comparisons could provide further understanding of efficacy beliefs and the differences in traditional and journalistic writing ability. While they both build on a foundation of accurate writing ability, it is clear traditional writing ability and journalistic writing ability are two separate things. Clearly, the two efficacies overlap, but the development of a conceptual and operational definition is needed for both.

A longitudinal study of students' advancement through a journalism curriculum could provide further understanding of journalistic efficacy writing beliefs. This would entail a multi-year study that evaluated efficacy beliefs and actual ability at multiple points throughout students' academic careers. This would not only provide insight into the advancement of students as they prepare for a career in journalism, but also would provide insight into the successes and limitations of journalism curricula.

A variety of motivations, fears, and other variables, which play into students' success and failures, remain unexamined in the realm of journalism students. A variety of studies could focus on goal setting, expectations, writing anxiety, and other variables that have been linked to traditional writing and would likely influence journalistic writing. These variables often play into efficacy beliefs in other academic tasks and traditional writing efficacy. Understanding what students expect to gain from their journalistic studies and what tasks they tend to avoid due to anxiety could better prepare teachers to meet students' needs.

Journalism curricula that have incorporated writing elements aimed at social media and Web publishing may have changed writing standards for the media industry. For example, with only 140 characters available to Twitter users, the medium does not conform to traditional or journalistic writing. Social media may be a writing form unto itself. A study of Twitter's role in both traditional and journalistic writing efficacy could provide keen insight. Research in this area would likely require a social media writing efficacy scale, which might include such indicators as ability to express a concise thought in 140 characters, ability to use proper spelling in Tweets, or ability to write without the use of symbols and emoticons, since they are not journalistic writing style.

While this study provides a snapshot of students' ability to analytically evaluate journalistic course material, it is clear that further research is needed in this area to fully understand why low critical thinking ability predicts actual writing ability. Given the emphasis placed on future journalists to analytically think through information and situations, it is valuable to further understand this relationship. Schwarz (1999) suggests that when studying self-efficacy, measures need to be sensitive to specific variables, such as stereotypes, social position, sex, and sex. While a connection between such variables and critical thinking is not clear, it could be suggested that that critical thinking may require a more sensitive measurement tool when evaluating grammar self-efficacy.

Finally, it is clear that motivation and learning strategies play a role in academic success in studying for a career in journalism. It would be valuable to further understand how students use strategies to reach their academic goals. Students develop multiple motivations and skills in college. If these skills were not being utilized in the actual field of journalism, it would be

valuable to understand what skills are being used. This could further focus skill development in college and make journalism students more competitive and better prepared.

This research provides new insight into writing self-efficacy literature. Journalistic writing appears to differ from traditional writing in its relation to belief and ability. Despite that, a picture of journalistic writing education was still presented with the importance of motivation and classroom experience being highlighted. While students gain many of the skills desired in professional journalists, there are clear areas, such as analytic thinking, where students need to strengthen their skill sets. It is also clear that traditional journalism schools are still relevant in journalistic education. Such schools need to remain focused on foundational journalistic skill development, such as writing, while at the same time remain relevant by teaching students how to utilize modern media in the delivery of journalistic content.

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## **Appendices**

## Appendix A

Directions: On a scale from 0 (no chance) to 10 (completely certain), how confident are you of being able to successfully communicate in writing, what you want to say in each of the following writing tasks. You may select any number between 0 and 10.

\_\_\_ Prepare a resume describing your employment history and skills

\_\_\_ Write a one or two sentence answer to a specific test question

\_\_\_ Compose a one or two page essay in answer to a test question

\_\_\_ Write a letter to the editor of the daily newspaper

\_\_\_ Compose an article for a popular magazine such as Newsweek

\_\_\_ Write useful class notes

\_\_\_ Write a hard news story

\_\_\_ Break a news story on Twitter

\_\_\_ Write a feature story for a print or Web publication

\_\_\_ Write a Web summary news story

\_\_\_ Write a news headline

## Appendix B

Directions: On a scale from 0 (no chance) to 10 (completely certain), how confident are you that you can perform each of the following writing skills? You may use any number between 0 and 10.

- \_\_\_ Correctly spell all words in a one page passage
- \_\_\_ Correctly punctuate a one page passage
- \_\_\_ Correctly use parts of speech (i.e. nouns, verbs, adjectives, etc.)
- \_\_\_ Correctly use AP (Associated Press) style in writing
- \_\_\_ Write a simple sentence with proper punctuation and grammatical structure
- \_\_\_ Correctly use plurals, verb tenses, prefixes, and suffixes
- \_\_\_ Write compound and complex sentences with proper punctuation and grammatical structure
- \_\_\_ Organize sentences into a paragraph as to clearly express a theme
- \_\_\_ Write a paper with good overall organization (e.g. ideas in order, effective transitions, etc.)

## Appendix C

### *Clarity/quality*

- 7 — Shows high levels of clarity, modesty, and precision.
- 6 — Shows high levels of two of the above items and moderate levels of the third.
- 5 — Shows high levels of at least two of the above items.
- 4 — Shows high levels of one of the above and moderate levels of the second or third.
- 3 — Shows high levels of at least one of the above items.
- 2 — Shows moderate level of at least one of the above items.
- 1 — Lacks characteristics of clarity, modesty, or precision.

### *Organization*

- 5 — Writing sample is structured in inverted pyramid style with short paragraphs.
- 4 — Writing sample contains high levels of one of the above items and moderate levels of the other.
- 3 — Writing sample contains moderate levels of one of the above elements.
- 2 — Writing sample contains poor organization and long paragraphs.
- 1 — Writing sample is without clear organization and contains very long paragraphs.

### *Quantity/density*

- 5 — The writing sample is efficient and one thought was expressed in each paragraph.
- 4 — The writing sample was somewhat efficient and one thought was expressed per paragraph.
- 3 — The writing sample was wordy, but still contained a single thought per paragraph.
- 2 — The writing sample was wordy, and contained two thoughts per paragraph.
- 1 — The writing sample was wordy and multiple thoughts were found in each paragraph.

### *Language mechanics/usage*

- 5 — No errors
- 4 — One error
- 3 — Some errors mechanically, but not distracting
- 2 — Several errors mechanically; somewhat distracting
- 1 — Very poor mechanics; quite distracting

### *Media writing standards*

- 5 — No errors.
- 4 — One error.
- 3 — at least two errors.
- 2 — Multiple errors; not distracting.
- 1 — multiple errors; quite distracting

## Appendix D

Directions: The following questions ask about your motivation for and attitudes about this class.

Remember there are no right or wrong answer, just answer as accurately as possible. Use the scale below to answer the questions. If you think the statement is very true of you, circle 7; if a statement is not at all true of you, circle 1. If the statement is more or less true of you, find the number between 1 and 7 that best describes you.

In a class like this, I prefer course material that really challenges me so I can learn new things. \_\_\_

I think I will be able to use what I learn in this course in other courses. \_\_\_

It is important for me to learn the course material in this class. \_\_\_

In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn. \_\_\_

I am very interested in the content area of this course. \_\_\_

The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible. \_\_\_

I think the course material in this class is useful for me to learn. \_\_\_

When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade. \_\_\_

I like the subject matter of this course. \_\_\_

Understanding the subject matter of this course is very important to me. \_\_\_

Directions: The following questions ask about your learning strategies and study skills for this class.

Again, there are no right or wrong answers. Answer the questions about how you study in this class as accurately as possible. Use the same scale to answer the remaining questions. If you think the statement is very true of you, circle 7; if a statement is not at all true of you, circle 1. If the statement is more or less true of you, find the number between 1 and 7 that best describes

When reading for this course, I make up questions to help focus my reading. \_\_\_

I often find myself questioning things I hear or read in this course to decide if I find them convincing. \_\_\_

I make good use of my study time for this course. \_\_\_

When a theory, interpretation, or conclusion is presented in class or in the readings, I try to decide if there is good supporting evidence. \_\_\_

I treat the course material as a starting point and try to develop my own ideas about it. \_\_\_

I find it hard to stick to a study schedule. \_\_\_

I have a regular place set aside for studying. \_\_\_

I try to play around with ideas of my own related to what I am learning in this course. \_\_\_

I make sure that I keep up with the weekly readings and assignments for this course. \_\_\_

Whenever I read or hear an assertion or conclusion in this class, I think about possible alternatives. \_\_\_

I attend this class regularly. \_\_\_

I often find that I don't spend very much time on this course because of other activities. \_\_\_

I rarely find time to review my notes or readings before an exam. \_\_\_

## Vita

Matthew Broaddus was born in Sapulpa, Oklahoma. He was homeschooled through junior high, and graduated from Sapulpa High School, in Sapulpa Oklahoma. In 1998, he earned an Associate of Arts in News Writing, from Tulsa Community College, in Tulsa, Oklahoma. After spending a semester studying ministry at John Brown University, in Siloam Springs Arkansas, he returned to Oklahoma in 1999 and worked at the Sapulpa Daily Herald, serving as the Managing Editor from April 2001 to January 2006. While working full-time as the Managing Editor of the Sapulpa Herald, he earned a Bachelor's of Arts in Journalism and Broadcasting, in 2003, from Oklahoma State University, in Stillwater, Oklahoma. In 2006, Matthew accepted an academic appointment as the Editorial Coordinator of the *Journal of Information and Knowledge Management*, at the University of Oklahoma. He earned a Master's of Science in Knowledge Management from the University of Oklahoma, in 2008. Matthew worked as the Children and Family Minister at First Christian Church, in Sapulpa Oklahoma, from March 2006 to August 2009, when he accepted a graduate teaching and research position in the College of Communication and Information at the University of Tennessee, Knoxville. He graduated with his Doctor of Philosophy in Communication and Information in May 2012. Matthew has taught as an adjunct instructor at Johnson University, in Knoxville, Tennessee, since August 2011, and has accepted a full-time Assistant Professor of Media Communication position at Johnson University.